



Montana Department of
REVENUE

Capitalization Rate Study

Centrally Assessed Properties
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January 2012



Montana Department of Revenue



Dan Bucks
Director

2012 Capitalization Rate Study
Business Tax & Valuation Bureau
Centrally Assessed Properties

Brian Schweitzer
Governor

METHODOLOGY

The Business Tax and Valuation Bureau develops a capitalization rate for each centrally assessed utility industry group using the band-of-investment technique. The typical industry rate for each source of capital (common equity and debt) is weighted according to its proportion in the typical market capital structure for each industry to derive a weighted average direct capitalization rate for the specific industry. The rate for each of the sources of capital is taken from directly observed information in the market.

For a company in a given industry, the capitalization rate for its industry is applied directly to an estimate of the company's typical net utility operating income to derive an income indicator of value for the company.

COMPARABLE COMPANIES

The companies used as comparables are taken from the appropriate industry group in the Value Line Investment Survey.

THE RATE FOR COMMON EQUITY

Under direct capitalization, the measure of the rate for common equity is the Earnings/Price (E/P) ratio. The E/P ratio is the annual earnings (net operating income) per share of common stock divided by the average market price per share for common stock.



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For each of the companies included in the equity portion of the industry capitalization rate data set, the Bureau calculates several different measures of the E/P ratio, and then calculates an industry (simple) average for each of these measures:

- | | |
|----------------------------|--|
| E/P (Yahoo) | The previous calendar year's earnings per share reported on Yahoo Finance's website is divided by the average of the previous calendar year's monthly high and low price (January through December) reported by Yahoo Finance. |
| E/P (VL) | The previous calendar year's earnings per share reported in the Value Line Investment Survey is divided by the average of the previous calendar year's monthly high and low price (January through December) reported by Yahoo Finance. |
| Inverse of P/E (Yahoo) | This is calculated by dividing 1 by the Price/Earnings (P/E) ratio reported by Yahoo Finance for end of the previous calendar year. |
| Inverse of P/E (VL) | This is calculated by dividing 1 by the P/E ratio reported in the Value Line Investment Survey for end of the previous calendar year. |
| Inverse of MEDIAN P/E (VL) | This is calculated by dividing 1 by the MEDIAN Price/Earnings ratio reported in the Value Line Investment Survey for end of the previous calendar year. Value Line derives the MEDIAN P/E ratio by calculating the average of a company's last 10 years P/E ratios after deleting the 2 highest and 2 lowest values. |



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THE RATE FOR PREFERRED STOCK

The measure of the rate for preferred stock is a percent dividend yield.

The Business Tax and Valuation Bureau does not calculate an annual (simple) average of the monthly percent yields for all preferred stock issues as a separate rate used in the band of investment. Instead, the preferred stock is included in the debt portion of the capital structure.

THE RATE FOR DEBT

The measure of the rate for debt used in the direct capitalization rate is the current yield. Current yield is equal to the annual coupon rate divided by price (expressed as a percent). While the measure of the rate of debt for the yield rate is yield to maturity. The yield to maturity is the interest rate that equates the present value of a bond's cash flow to its current price (expressed as a percent). Yield to maturity assumes that the bond will be held to maturity. If the bond is not held until maturity, or if the interim cash flows are reinvested at a rate that differs from the yield to maturity, an investor's actual yield will differ from the yield to maturity. The yield to maturity calculation equates a bond's cash flows to its current price; this yield calculation considers both coupon and income and any capital gain or loss the investor will realize by holding the bond to maturity.

Valuation theory typically requires the use of current yields (the annual coupon rate divided by price) for direct capitalization and the use of yield to maturity for yield capitalization, the two rates will generally not vary significantly for seasoned issues (except under certain circumstances) and they will be the same for new issues.



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Yield to Maturity

For each of the companies included in the embedded debt portion Embedded debt of the industry capitalization rate data set, the bureau calculates an annual (simple) average of the monthly yield to maturities for all debt issues listed in the Standard & Poor's Bond Guide. These average yields are then used to calculate an industry (simple) average.

DIRECT CAPITALIZATION of "GROSS" CASH FLOW

The Business Tax and Valuation Bureau develops another direct capitalization rate for each centrally assessed utility industry group. This direct capitalization rate is calculated like the rate for capitalizing net operating income. The only difference is that the rate for common equity is "gross" cash flow per share divided by price per share.

"Gross" cash flow is defined as net utility operating income plus depreciation and amortization expense minus preferred stock dividends.

For a company in a given industry, the capitalization rate for its industry is applied directly to an estimate of the company's typical "gross" cash flow to derive an income indicator of value for the company.

The use of the "gross" cash flow capitalization model is less common than the traditional net operating income capitalization model. The "gross" cash flow model can be valuable in developing an income indicator of value for industries or companies that have been experiencing net operating losses, or in cases where book depreciation does not reflect economic depreciation.



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YIELD CAPITALIZATION of PROJECTED FUTURE (NET) CASH FLOWS

The Business Tax and Valuation Bureau also develops a yield capitalization rate for each centrally assessed utility industry group. Yield capitalization is fundamentally different from direct capitalization, both in the rates developed for each source of capital (common equity and debt), and the level and nature of income that the capitalization rate is applied to.

The rate for each source of capital is the "cost of capital" for each industry group. The cost of debt is the yield to maturity for debt derived from the set of comparable companies for each industry group. The cost of equity capital is calculated using several methods, including the DCF (discounted cash flow) model, the ERP (equity risk premium model), the CAPM (capital asset pricing model) or a combination thereof depending on the quantity and quality of available data.

The correct application of a yield capitalization rate is to use the rate for the industry to discount a stream of estimated future (net) cash flows for a company to present value.

It is important to note that the cash flow used in yield capitalization is "true", "net" or "free" cash flow and not the "gross" cash flow used in the Department's direct "gross" cash flow indicator.

The development of a valid future cash flow stream requires considerable time and effort. Most companies choose not to spend the time and effort to develop this future cash flow stream. Therefore, in the event a company does not provide a future cash flow stream as requested in the Annual Reporting Forms, the Department normalizes "net" historical cash flows to determine a cash flow stream. The yield capitalization rate for specific industries is applied directly to this derived cash flow stream.

Properly developed and applied, yield capitalization and direct capitalization usually result in similar indicators of value.



Montana Department of Revenue

**2012 Capitalization Rate Study
Business Tax & Valuation Bureau
Centrally Assessed Properties**

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The Centrally Assessed Property Appraisers, of the Business Tax & Valuation Bureau of the Montana Department of Revenue, produced this study. The team members include:

Grace Gilmore	Kory Hofland
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Doug Roehm	Herschel Mays



Montana Department of
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2012 Capitalization Rate Study

Scheduled Airlines

MONTANA DEPARTMENT OF REVENUE

**Direct Capitalization Rate Study
Industry: Scheduled Passenger Airlines
2012 Assessment Year**

Equity Measures Calculated:

E/P estimates:

All	Median	
9.46%	6.59%	Yahoo
14.28%	7.89%	Value Line
11.87%	7.24%	Average

Inverse of P/E Ratios:

9.18%	6.21%	Yahoo
8.94%	8.62%	Value Line
9.06%	7.41%	Average of Inverse of the P/E
6.06%	6.06%	Inverse of median P/E, Value Line
10.47%	7.33%	Average of all above except median P/E

Mean = 9.59% 7.07%

Median = 9.18% 6.59%

Equity Measure NUOI = 9.75%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate				
Equity	33.45%	x	9.75%	= 3.26%
Debt	66.55%	x	9.40%	= 6.26%
	100.00%			9.52%
Direct Cap Rate NUOI =				9.75%

Gross Cash Flow / Price:

All	Median	
24.11%	23.28%	Value Line

Equity Measure Gross = 24.25%

Industry Market Capital Structure Gross Cash Flow (GCF) Rate				
Equity	33.45%	x	24.25%	= 8.11%
Debt	66.55%	x	9.40%	= 6.26%
	100.00%			14.37%
Direct Cap Rate GCF =				14.50%

MONTANA DEPARTMENT OF REVENUE

**Direct Capitalization Rate Study
Industry: Scheduled Freight Airlines
2012 Assessment Year**

Equity Measures Calculated:

E/P estimates:

All	Median	
8.14%	6.98%	Yahoo
8.97%	7.40%	Value Line
8.56%	7.19%	Average

Inverse of P/E Ratios:

7.94%	6.96%	Yahoo
8.36%	7.03%	Value Line
8.15%	6.99%	Average of Inverse of the P/E
6.88%	5.56%	Inverse of median P/E, V. L.
8.35%	7.09%	Average of all above except median P/E
Mean =	8.06%	6.79%
Median =	8.14%	6.98%

Equity Measure NUOI = 7.40%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate				
Equity	88.08%	x	7.40%	= 6.52%
Debt	11.92%	x	7.00%	= 0.83%
	100.00%			7.35%
Direct Cap Rate NUOI =				7.50%

Gross Cash Flow / Price:

All	Median	
12.64%	14.13%	Value Line

Equity Measure Gross = 12.60%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)				
Equity	88.08%	x	12.60%	= 11.10%
Debt	11.92%	x	7.00%	= 0.83%
	100.00%			11.93%
Direct Cap Rate GCF =				12.00%

MONTANA DEPARTMENT OF REVENUE

**Yield Capitalization Rate Study
Industry: Scheduled Airlines
2012 Assessment Year**

Equity Measures Calculated:

	Passenger	Freight
Dividend Growth Model	7.20%	7.10%
Capital Asset Pricing Model	10.82%	10.95%
Mean =	9.01%	9.03%
Median =	9.01%	9.03%

Equity Measure FCF = 10.50% 9.25%

Debt Measures Calculated, Yield to Maturity:

	All Bonds				20 Year Plus Bonds			
	All		Freight		Passenger		Freight	
	Annual	4th Qtr	Annual	4th Qtr	Annual	4th Qtr	Annual	4th Qtr
AA's	3.54%	2.95%	3.54%	2.95%				
BBB's	3.87%	3.65%	4.10%	4.40%	6.44%	5.70%	5.91%	5.33%
BB's	4.65%	0.00%	0.00%	0.00%				
NR's	18.99%	25.57%	0.00%	0.00%	15.85%	15.85%		
All =	13.77%	18.26%	3.91%	3.91%	11.15%	10.78%	5.91%	5.33%
Mean =	7.76%	8.04%	1.91%	1.84%	11.15%	10.78%	5.91%	5.33%
Median =	4.26%	3.30%	1.77%	1.47%	11.15%	10.78%	5.91%	5.33%

**Debt Measure Passenger= 13.00%
Debt Measure Freight= 6.00%**

Yield Cap Rate Free Cash Flow - Passenger					
Equity	33.45%	x	10.50%	=	3.51%
Debt	66.55%	x	13.00%	=	8.65%
	100.00%				12.16%
Weighted Average Cost of Capital (WACC) =				12.25%	

Yield Cap Rate Free Cash Flow - Freight					
Equity	88.08%	x	9.25%	=	8.15%
Debt	11.92%	x	6.00%	=	0.72%
	100.00%				8.86%
Weighted Average Cost of Capital (WACC) =				9.00%	

**Where Assumed Growth Rate = Inflation
see appendix for calculation**

Growth = 2.05%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure from Value Line and YaHoo Finance
Industry: Airlines
2012 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L
Company	Ticker Symbol	(VL) Fin Str	(VL) Shares (000)	(YAHOO) Avg Price Common	(VL) Book Value Per Share	Mkt Value Common	(VL) Book Value Common	(VL) Book Value Preferred (000)	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt Value Pref. & Debt
				4th Qtr	DxE	DxF					
Alaska Air	ALK	C++	35,900	65.81	30.77	2,362,699	1,104,643	0	1,313,000	1.00	1,313,000
Allegiant Travel company	ALGT	B+	19,000	51.28	15.66	974,352	297,540	0	11,600	1.00	11,600
AMR Corp	AMR		333,400		(11.83)		(3,944,122)	0	9,253,000	1.00	9,253,000
Delta Air Lines	DAL	C++	834,700	8.04	1.08	6,713,770	901,476	0	13,179,000	1.00	13,179,000
Great Lakes Aviation	GLUX		14,300	0.66	2.03	9,367	29,029	0	5,600	1.00	5,600
JetBlue Airways	JBLU	C++	294,700	4.30	5.61	1,268,192	1,653,267	0	2,850,000	1.00	2,850,000
Pinnacle Airlines Corp.	PNCL	C	18,700	2.21	6.41	41,296	119,867	0	664,300	1.00	664,300
Republic Airways Holdings Inc.	RJET	C+	48,200	3.39	12.66	163,318	610,212	0	2,308,700	1.00	2,308,700
Spirit Airlines, Inc.	SAVE	B+	0	15.35	0.00	0	0	0	0	1.00	0
SkyWest Inc	SKYW	B	54,200	12.41	26.23	672,622	1,421,666	0	1,738,900	1.00	1,738,900
Southwest Airlines	LUV	B+	747,400	8.21	8.35	6,136,154	6,240,790	0	2,875,000	1.00	2,875,000
US Airways Group	LCC	C+	161,900	5.29	0.52	856,721	84,188	0	4,003,000	1.00	4,003,000
Atlas Air	AAWW	B	25,900	37.40	40.35	968,746	1,045,065	0	391,000	1.00	391,000
Air Transport Services Grp	ATSG	C++	63,700	4.95	4.75	314,997	302,575	0	265,900	1.00	265,900
Air T	AIRT	B+	2,400	8.11	10.79	19,468	25,896	0	0	1.00	NA
FedEx Corp	FDX	B++	317,000	78.78	48.01	24,971,675	15,219,170	0	1,667,000	1.00	1,667,000
United Parcel'S'	UPS	A	987,100	69.29	8.08	68,399,449	7,975,768	0	10,491,000	1.00	10,491,000

SUMS & AVERAGES

ALL	113,872,825	37,031,152	51,017,000	51,017,000
PASSENGER AIRLINES	19,198,490	12,462,678	38,202,100	38,202,100
MEDIAN OF PASSENGER AIRLINES	915,536	755,844	2,308,700	2,308,700
FREIGHT CARRIERS	94,674,335	24,568,474	12,814,900	12,814,900
MEDIAN OF FREIGHT CARRIERS	968,746	1,045,065	1,029,000	1,029,000

FOREIGN CARRIERS -British Air, World Air Holdings &
WestJet Airlines Ltd.

Data not used because of outliers and bankruptcy

* Bold denotes operations in Montana

** All Negative values left out of calculations

Notes/Rational for Changes to Guideline Companies

AirTran Holdings is now part of Southwest Airlines

AMR Corp in Bankruptcy

Mesa Air Group in Bankruptcy

Great Lakes Airlines data was no longer in ValueLine trading below \$1

Added 2 New Companies:

Spirit Airlines NDQ

Republic Airways Holding Inc.

INDUSTRY MARKET STRUCTURE:

	ALL	Passenger Airlines	Freight
EQUITY	69.06%	33.45%	88.08%
DEBT	30.94%	66.55%	11.92%
TOTAL	100.00%	100.00%	100.00%

113,872,825 37,031,152 51,017,000 51,017,000

19,198,490 12,462,678 38,202,100 38,202,100

915,536 755,844 2,308,700 2,308,700

94,674,335 24,568,474 12,814,900 12,814,900

968,746 1,045,065 1,029,000 1,029,000

100.00% 100.00% 100.00% 100.00%

164,889,825 57,400,590 107,489,235

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure from Value Line and Yahoo Finance
Industry: Airlines
2012 Assessment Year

A	B	M	N	O	P	Q	R	S	T	U	V	W	X	Y
Company	Ticker Symbol	(YAHOO)	(YAHOO)	(VL)	(VL)	(VL)	(VL)	(YAHOO)	(YAHOO)	(VL)	(VL)	(VL)	(VL)	(VL)
		EPS	E/P	EPS	E/P	CF/S	CF/P	P/E	Inverse of P/E	P/E	Inverse of P/E	Median P/E	Inverse of Median P/E	Beta
			M/E		O/E		Q/E		I/S		1/U		1/W	
Alaska Air	ALK	6.66	10.12%	8.20	12.46%	15.35	23.32%	10.83	9.23%	8.57	11.67%			1.15
Allegiant Travel company	ALGT	2.65	5.17%	2.60	5.07%	4.75	9.26%	19.96	5.01%	17.23	5.80%			0.80
AMR Corp	AMR			(3.45)										1.55
Delta Air Lines	DAL	0.53	6.59%	1.15	14.30%	2.90	36.05%	16.09	6.21%	5.91	16.92%			1.40
Great Lakes Aviation	GLUX	0.21	32.06%	0.37	56.49%			3.10	32.31%					
JetBlue Airways	JBLU	0.24	5.58%	0.20	4.65%	1.00	23.24%	20.25	4.94%	21.56	4.64%			1.25
Pinnacle Airlines Corp.	PNCL	(0.71)	(32.15%)	(0.67)	(30.34%)			(2.06)	(48.46%)					1.25
Republic Airways Holdings Inc.	RJET	(0.63)	(18.59%)	(0.50)	(14.76%)			(5.94)	(16.82%)					0.85
Spirit Airlines, Inc.	SAVE	1.47	9.58%	1.35	8.80%	1.45	9.45%	10.77	9.29%	9.50	10.53%			
SkyWest Inc	SKYW	0.52	4.19%	(0.10)	(0.81%)	5.10	41.10%	23.85	4.19%	36.75	2.72%	11.00	9.09%	1.10
Southwest Airlines	LUV	0.20	2.44%	0.45	5.48%	1.35	16.44%	42.08	2.38%	14.91	6.71%	33.00	3.03%	1.00
US Airways Group	LCC	0.50	9.45%	0.37	6.99%	1.80	34.02%	11.05	9.05%	7.96	12.56%			1.65
Atlas Air	AAWW	3.95	10.56%	4.15	11.10%	5.55	14.84%	9.69	10.32%	8.36	11.96%			1.65
Air Transport Services Grp	ATSG	0.34	6.88%	0.64	12.94%			14.37	6.96%					1.80
Air T	AIRT	0.84	10.36%	0.59	7.27%			10.02	9.98%			9.50	10.53%	0.80
FedEx Corp	FDX	5.50	6.98%	5.83	7.40%	11.13	14.13%	14.85	6.74%	14.23	7.03%	18.00	5.56%	1.00
United Parcel'S'	UPS	4.12	5.95%	4.25	6.13%	6.20	8.95%	17.50	5.71%	16.45	6.08%	22.00	4.55%	0.85

SUMS & AVERAGES

ALL	8.99%	12.24%	20.98%	8.74%	8.78%	6.55%	1.21
PASSENGER AIRLINES	9.46%	14.28%	24.11%	9.18%	8.94%	6.06%	1.20
MEDIAN OF PASSENGER AIRLINES	6.59%	7.89%	23.28%	6.21%	8.62%	6.06%	1.20
FREIGHT CARRIERS	8.14%	8.97%	12.64%	7.94%	8.36%	6.88%	1.22
MEDIAN OF FREIGHT CARRIERS	6.98%	7.40%	14.13%	6.96%	7.03%	5.56%	1.00

FOREIGN CARRIERS -British Air, World Air Holdings &
WestJet Airlines Ltd.

Data not used because of outliers and bankruptcy

* Bold denotes operations in Montana

** All Negative values left out of calculations

Notes/Rational for Changes to Guideline Companies

AirTran Holdings is now part of Southwest Airlines

AMR Corp in Bankruptcy

Mesa Air Group in Bankruptcy

Great Lakes Airlines data was no longer in ValueLine tradit

Added 2 New Companies:

Spirit Airlines NDQ

Republic Airways Holding Inc.

Overall Industry Beta = 1.21
 Passenger Beta = 1.20
 Freight Beta = 1.22

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Airlines
2012 Assessment Year

$$K_E = D_1 / P_0 + G_A$$

K_E= Cost of Equity
D₁= Expected Dividends
P₀= Current Price Per Share
G= Sustainable Growth

Scheduled Passenger Airlines

Company Name	Ticker	Stock Price (P ₀)	Expected Dividend 1 Year	Dividend Yield (D ₁ /P ₀)	Dividend Growth (G ₁)	K _E 1 Year
Allegiant Travel company	ALGT	51.28	Nil		Nil	
Alaska Air	ALK	65.81	Nil		Nil	
AMR Corp	AMR		Nil		Nil	
Delta Air Lines	DAL	8.04	Nil		Nil	
Great Lakes Aviation	GLUX	0.66				
JetBlue Airways	JBLU	4.30	Nil		Nil	
Southwest Airlines	LUV	8.21	0.02	0.24%	1.00%	1.24%
US Airways Group	LCC	5.29	Nil		Nil	
Pinnacle Airlines Corp.	PNCL	2.21	--		--	
Republic Airways Holdings Inc.	RJET	3.39	--		--	
Spirit Airlines, Inc.	SAVE	15.35	Nil		Nil	
SkyWest Inc	SKYW	12.41	0.20	1.61%	5.50%	7.11%

*Bold denotes operations in Montana

Median= 4.18%
Mean= 4.18%

Cost of Equity - Domestic, (K_E) = 7.20%

Scheduled Freight Airlines

Company Name	Ticker	Stock Price (P ₀)	Expected Dividend 1 Year	Dividend Yield (D ₁ /P ₀)	Dividend Growth (G ₁)	K _E 1 Year
Atlas Air	AAWW	37.40	Nil		Nil	
Air T	AIRT	8.11	--		10.00%	
Air Transport Services Grp	ATSG	4.95	--		--	
FedEx Corp	FDX	78.78	0.52	0.66%	7.00%	7.66%
United Parcel'B'	UPS	69.29	2.08	3.00%	3.50%	6.50%

*Bold denotes operations in Montana

Median= 7.08%
Mean= 7.08%

Cost of Equity - Freight, (K_E) = 7.10%

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model
Industry: Airlines
2012 Assessment Year

$$K_E = R_F + \beta (R_M - R_F)$$

	Passenger	Freight
K_E = Cost of Equity	10.82%	10.95%
R_F = Risk Free Rate	2.89%	2.89%
β = Beta	1.20	1.22
R_M = Market Rate of Return	9.50%	9.50%
R_P = Equity Risk Premium ($R_M - R_F$)	6.61%	6.61%

R_m = Investor's Market Rate of Return

Ibbotson, SBBI, Large Company, Average Annual Return, *Arithmetic Average, Ex-Post

Ibbotson, SBBI, Large Company, Average Annual Return, *Geometric Average, Ex-Post

3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante

R_M =	11.80%
R_M =	9.80%
R_M =	8.50%

Mean = 10.03%
Median = 9.80%

R_M = 9.50%

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2011-31 Table 2 December 2011

Rev Rule 2011-31 Table 2

<u>Annual Rates</u>	Short Term - AFR	R_f = 0.45%
	Mid Term - AFR	R_f = 1.69%
	Long Term - AFR	R_f = 3.55%

The ValueLine Investment Survey

U.S. Treasury Securities January 6, 2012

3 Month	R_f = 0.01%
6 Month	R_f = 0.05%
1 Year	R_f = 0.10%

Federal Reserve Statistical Release

Treasury constant Maturities, 2011

Market yield on U.S. Treasury securities, Annual Averages

3-month constant maturity, quoted on investment basis	R_f = 0.02%
6-month constant maturity, quoted on investment basis	R_f = 0.06%
1-year constant maturity, quoted on investment basis	R_f = 0.12%

U.S. Treasury Securities Long-Term December 30, 2011

20 year constant maturity	R_f = 2.57%	Mean = 0.67%
30 year constant maturity	R_f = 2.89%	Median = 0.10%
		Weighted Mean = 0.86%

R_f = 2.89%

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Airlines
2012 Assessment Year

Ticker	Company		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Avg.	Annual Avg.	Yahoo P-E	EPS 1st 12 mo
AAI	AirTran Hldgs	high low																
			WAS ACQUIRED BY SOUTHWEST AIRLINES ON MAY 2, 2011															
ALGT	Allegiant Travel company	high low	\$52.35 \$46.11	\$46.18 \$39.21	\$44.40 \$40.61	\$45.61 \$38.95	\$47.98 \$43.84	\$50.29 \$42.12	\$49.93 \$41.55	\$48.14 \$40.31	\$49.19 \$43.90	\$55.19 \$45.25	\$54.00 \$47.46	\$55.36 \$50.43	\$51.28	\$46.60	19.96	2.65
ALK	Alaska Air	high low	\$64.34 \$56.53	\$65.00 \$56.28	\$64.00 \$56.15	\$66.09 \$59.00	\$70.07 \$64.72	\$69.63 \$61.31	\$70.61 \$59.50	\$63.48 \$51.79	\$60.89 \$52.65	\$69.31 \$51.10	\$69.64 \$60.56	\$77.14 \$67.13	\$65.81	\$62.79	10.83	6.66
AMR	AMR Corp	high low																
			BANKRUPTCY NO LONGER AVAILABLE															
DAL	Delta Air Lines	high low	\$13.21 \$11.11	\$12.13 \$10.37	\$11.64 \$9.71	\$10.70 \$8.91	\$11.60 \$9.91	\$10.18 \$9.10	\$9.41 \$7.28	\$8.24 \$6.41	\$8.57 \$7.06	\$8.98 \$6.64	\$8.50 \$7.08	\$9.13 \$7.93	\$8.04	\$9.33	16.09	0.53
FWRD	Forward Air	high low	\$29.93 \$27.49	\$32.30 \$26.34	\$30.76 \$27.10	\$35.03 \$29.76	\$35.53 \$31.26	\$35.13 \$31.79	\$36.32 \$31.00	\$31.37 \$23.70	\$30.21 \$23.97	\$34.19 \$24.10	\$34.00 \$28.74	\$33.49 \$30.64	\$30.86	\$30.59	21.10	1.52
GLUX	Great Lakes Aviation	high low	\$1.79 \$1.25	\$1.60 \$1.25	\$1.44 \$0.90	\$1.43 \$0.61	\$0.90 \$0.50	\$0.58 \$0.32	\$0.95 \$0.40	\$0.85 \$0.50	\$0.80 \$0.70	\$0.78 \$0.50	\$0.85 \$0.50	\$0.75 \$0.55	\$0.66	\$0.86	3.10	0.21
GLUX.OB																		
JBLU	JetBlue Airways	high low	\$7.13 \$5.71	\$6.12 \$5.55	\$6.45 \$5.44	\$6.36 \$5.35	\$6.38 \$5.62	\$6.29 \$5.45	\$6.26 \$4.55	\$4.99 \$3.86	\$4.59 \$3.90	\$4.74 \$3.49	\$4.47 \$3.40	\$5.65 \$4.07	\$4.30	\$5.24	20.25	0.24
LCC	US Airways Group	high low	\$11.56 \$9.67	\$10.21 \$8.16	\$9.38 \$7.71	\$9.16 \$7.76	\$10.35 \$8.98	\$9.34 \$7.94	\$9.15 \$5.77	\$6.43 \$4.95	\$6.57 \$4.68	\$6.48 \$4.53	\$5.73 \$3.96	\$6.23 \$4.82	\$5.29	\$7.48	11.05	0.50
LUV	Southwest Airlines	high low	\$13.59 \$11.81	\$12.58 \$11.41	\$12.88 \$11.54	\$12.87 \$11.30	\$12.44 \$10.68	\$11.92 \$9.61	\$11.65 \$7.81	\$10.17 \$7.79	\$8.98 \$7.15	\$9.28 \$7.37	\$8.63 \$8.12	\$8.71 \$8.21	\$10.40	\$10.40	42.08	0.20
MESA	Mesa Air Group	high low																
MESAQ.PK	Ticker Change																	
PNCL	Pinncale Airlines Corp.	high low	\$8.68 \$7.01	\$7.69 \$5.96	\$6.18 \$5.21	\$6.11 \$5.11	\$5.78 \$4.76	\$4.97 \$4.03	\$4.77 \$3.99	\$4.08 \$3.00	\$3.61 \$2.57	\$3.16 \$2.52	\$2.64 \$2.00	\$2.13 \$0.80	\$2.21	\$4.45	(2.06)	(0.71)
RJET	Republic Airways Holdings Inc.	high low	\$7.79 \$5.95	\$6.87 \$5.73	\$6.49 \$5.92	\$6.47 \$5.15	\$5.55 \$4.68	\$5.69 \$4.20	\$5.65 \$4.28	\$4.40 \$2.98	\$3.27 \$2.50	\$3.08 \$2.47	\$4.78 \$2.51	\$4.16 \$3.33	\$3.39	\$4.75	(5.94)	(0.63)
SKYW	SkyWest Inc	high low	\$16.78 \$15.00	\$16.50 \$14.97	\$17.28 \$15.65	\$16.97 \$15.45	\$16.92 \$15.09	\$15.54 \$14.27	\$15.52 \$12.00	\$13.69 \$11.93	\$12.95 \$10.88	\$13.90 \$10.47	\$14.22 \$11.07	\$13.19 \$11.61	\$12.41	\$14.24	23.85	0.52
SAVE	Spirit Airlines, Inc.	high low	NO DATA	NO DATA	NO DATA	NO DATA	\$11.90 \$11.11	\$12.33 \$11.48	\$14.43 \$12.01	\$13.65 \$10.18	\$12.86 \$10.73	\$17.21 \$11.42	\$17.48 \$14.31	\$16.99 \$14.67	\$15.35	\$13.30	10.77	1.47
UAL	United Continenetal Holdings Inc.	high low	\$27.47 \$23.63	\$27.72 \$21.65	\$25.66 \$21.95	\$23.43 \$19.32	\$26.84 \$23.17	\$25.60 \$21.69	\$23.28 \$16.45	\$19.25 \$15.92	\$21.89 \$17.28	\$21.44 \$16.83	\$19.28 \$15.51	\$21.45 \$17.90	\$18.74	\$21.44	11.31	1.74
UTIW	Ult Worldwide Inc	high low	\$22.29 \$20.53	\$22.72 \$19.79	\$20.38 \$17.78	\$24.05 \$19.54	\$22.88 \$21.13	\$22.39 \$18.92	\$20.10 \$16.00	\$16.49 \$11.94	\$15.90 \$12.21	\$15.94 \$11.99	\$15.64 \$13.46	\$15.24 \$12.55	\$14.14	\$17.91	19.30	0.72
AAWW	Atlas Air	high low	\$57.09 \$49.77	\$73.19 \$51.40	\$70.00 \$61.49	\$70.00 \$60.83	\$69.66 \$59.24	\$63.30 \$55.55	\$63.99 \$52.20	\$55.56 \$39.66	\$50.96 \$33.01	\$43.45 \$29.50	\$42.27 \$32.64	\$42.11 \$34.45	\$37.40	\$52.56	9.69	3.95

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Airlines
2012 Assessment Year

Ticker	Company		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Avg.	Annual Avg.	Yahoo P-E	EPS 1st 12 mo
AIRT	Air T	high low	\$10.50 \$9.63	\$10.13 \$9.21	\$9.97 \$9.19	\$9.55 \$9.25	\$9.69 \$9.15	\$9.63 \$8.75	\$9.25 \$8.70	\$8.96 \$5.78	\$7.98 \$7.50	\$8.24 \$7.15	\$8.62 \$7.82	\$8.74 \$8.10	\$8.11	\$8.82	10.02	0.84
ATSG	Air Transport Services Grp fka ABX	high low	\$8.15 \$7.00	\$8.65 \$7.17	\$8.50 \$7.18	\$8.50 \$7.12	\$8.21 \$7.22	\$7.44 \$6.14	\$7.04 \$4.74	\$6.00 \$4.30	\$5.52 \$4.31	\$5.92 \$3.86	\$5.72 \$4.40	\$5.20 \$4.57	\$4.95	\$6.37	14.37	0.34
FDX	FedEx Corp	high low	\$97.00 \$90.01	\$98.52 \$87.54	\$94.41 \$85.03	\$96.50 \$90.66	\$96.89 \$90.80	\$94.95 \$81.22	\$98.66 \$86.33	\$88.05 \$72.16	\$80.11 \$64.55	\$85.75 \$64.07	\$83.45 \$76.06	\$86.37 \$76.95	\$78.78	\$86.09	14.85	5.50
UPS	United Parcel'S'	high low	\$73.89 \$70.35	\$77.00 \$72.83	\$74.95 \$70.21	\$75.34 \$71.48	\$75.58 \$72.29	\$73.68 \$68.13	\$75.80 \$68.36	\$69.86 \$60.74	\$68.42 \$61.12	\$72.04 \$61.27	\$71.80 \$66.46	\$73.81 \$70.38	\$69.29	\$70.66	17.50	4.12

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Airlines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND CURRENT YIELD

Freight

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	S&P Bond Current Yield												Avg Full Year	Avg 4th QTR
						Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11		
United Parcel Service of Amer	8.38	911308AA2	Deb	04/01/2020	AA-	6.36	6.38	6.36	6.31	6.15	6.21	6.07	6.01	5.95	6.10	6.10	5.92	6.16%	6.04%
Federal Express	9.65	313309AJ5	Nts	06/15/2012	BBB	8.68	8.74	8.80	8.85	8.91	8.92	8.98	9.05	9.12	9.17	9.24	9.29	8.98%	9.23%
Federal Express	7.6		Nts	01/01/2097	BBB	6.62	6.49		6.42	6.22	6.37	6.12	5.68	5.17	5.25	5.31	5.48	5.92%	5.35%

Counts of data

	Annual	4th Qtr
AA's	6.16%	6.04%
BBB's	7.45%	7.29%
ALL	7.02%	6.87%
BBB- & Above	7.02%	6.87%
BB- & Above	7.02%	6.87%

*Investment Grade (BBB- & Above)

Passenger

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	S&P Bond Current Yield												Avg Full Year	Avg 4th QTR	
						Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11			
Southwest Airlines Co.	7.375	844741AN8	Deb	03/01/2027	BBB-	7.34	7.28	7.24	7.16	6.88	6.95	6.79	6.51	6.19	6.39	6.13	6.41	6.77%	6.31%	
Southwest Airlines Co.	6.5	844741AV0	Nts	03/01/2012	BBB-	6.16	6.19	6.20	6.22	6.25	6.28	6.31	6.34	6.37	6.39	6.41	6.44	6.30%	6.41%	
Southwest Airlines Co.	5.25	844741AW8	Nts	10/01/2014	BBB-	4.89	4.87	4.91	4.90	4.84	4.85	4.83	4.94	4.90	4.91	4.91	4.91	4.89%	4.91%	
Southwest Airlines Co.	5.12	844741AX6	Nts	03/01/2017	BBB-	4.94	4.92	4.93	4.91	4.77	4.78	4.70	4.78	4.78	4.88	4.84	4.86	4.84%	4.86%	
Southwest Airlines Co.	5.75	844741AY4	Nts	12/15/2016	BBB-	5.28	5.32	5.30	5.28	5.19	5.21	5.12	5.18	5.19	5.22	5.19	5.18	5.22%	5.20%	
Continental Airlines, Inc.	8.75	210795PT1	Nts	12/01/2011	BB-	8.48	8.48	8.47	8.54	8.52	8.53	8.53	8.72	8.73	8.74	8.75		8.59%	8.75%	
AMR Corp.	9	001765AC0	Deb	09/15/2016	NR	9.11	9.10	9.33	9.20	9.20	9.18	9.18	9.18	9.78	10.05	15.38	16.66	40.00	13.01%	24.01%
AMR Corp.	10.2	001765AE6	Deb	03/15/2020	NR	10.59	10.76	10.95	10.88	11.20	11.14	11.14	12.03	12.25	17.73	18.97	45.84	15.29%	27.51%	
AMR Corp.	9.88	001765AG1	Deb	06/15/2020	NR	10.40	10.53	10.72	10.65	10.94	10.79	10.79	11.86	12.04	17.80	19.00	44.40	14.99%	27.07%	
AMR Corp.	10	001765AK2	Deb	04/15/2021	NR	10.52	10.66	10.85	10.78	11.08	10.92	10.92	11.94	12.12	17.69	18.86	44.94	15.11%	27.16%	
AMR Corp.	9.75	001765AP1	Deb	08/15/2021	NR	10.26	10.40	10.58	10.48	10.80	10.65	10.65	11.64	11.81	17.25	18.57	43.82	14.74%	26.55%	
AMR Corp.	9.8	001765AQ9	Deb	10/01/2021	NR	10.31	10.45	10.63	10.56	10.85	10.71	10.71	11.77	11.95	17.34	18.66	44.04	14.83%	26.68%	
AMR Corp.	9	001765AU0	Deb	08/01/2012	NR	8.83	8.78	8.98	8.95	8.91	8.89	8.89	8.88	8.92	9.97	9.97	40.00	11.66%	19.98%	
Delta Air Lines, Inc.	9	247361AD0	Deb	05/15/2016	NR	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18	18.18		18.18%	18.18%	
Delta Air Lines, Inc.	10.375	247361WG9	Deb	02/01/2011	NR	19.76												19.76%		
Delta Air Lines, Inc.	9.75	247361WH7	Deb	05/15/2021	NR	17.81	17.81	17.81	17.81	17.81	17.81	17.81	17.81	17.81	17.81	17.81		17.81%	17.81%	
Delta Air Lines, Inc.	9.25	247361XX1	Deb	03/15/2022	NR	16.63	16.63	16.63	16.63	16.63	16.63	16.63	16.63	16.63	16.63	16.63		16.63%	16.63%	
Delta Air Lines, Inc.	10.38	247361XY9	Deb	02/15/2022	NR	19.76	19.12	19.12	19.12	19.12	19.12	19.12	19.12	19.12	19.12	19.12		19.18%	19.12%	
Delta Air Lines, Inc.	8.3	247361YGT	Nts	12/15/2029	NR	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37		15.37%	15.37%	
United Air Lines	10.85	909279AH4	Eq Tr '91B	02/19/2015	NR	24.66	24.66	24.66	24.66	24.66	24.66	24.66	24.66	24.66	24.66	24.66	24.66	24.66	24.66%	24.66%
United Air Lines	10.36	909279AN1	Eq Tr '91C	11/13/2012	NR															
United Air Lines	10.36	909279AP6	Eq Tr '91D	11/20/2012	NR	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54%	13.54%	
United Air Lines	10.36	909279AQ4	Eq Tr '91E	11/27/2012	NR															

Counts of data

	Annual	4th Qtr
BBB's	5.60%	5.54%
BB's	8.59%	8.75%
NR	15.99%	20.71%
ALL	13.41%	16.72%
BBB- & Above	5.60%	5.54%
BB- & Above	6.10%	6.07%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Airlines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
United Parcel Service of Amer	8.38	911308AA2	Deb	04/01/2020	AA-	4.18	4.21	4.14	3.99	3.59	3.73	3.42	3.27	3.12	3.05	3.07	2.72	3.54%	2.95%	
Federal Express	9.65	313309AJ5	Nts	06/15/2012	BBB	1.43	1.55	1.56	1.55	1.22	1.34	2.01	2.84	3.61	4.23	5.03	1.15	2.29%	3.47%	
Federal Express	7.6		Nts	01/01/2097	BBB	6.61	6.49		6.42	6.21	6.37	6.12	5.66	5.15	5.22	5.29	5.47	5.91%	5.33%	
Southwest Airlines Co.	7.375	844741AN8	Deb	03/01/2027	BBB-	7.32	7.24	7.18	7.06	6.64	6.73	6.49	6.05	5.47	5.84	5.41	5.88	6.44%	5.70%	
Southwest Airlines Co.	6.5	844741AV0	Nts	03/01/2012	BBB-	1.43	1.51	1.36	1.25	2.43	2.90	3.34	3.89	1.49	1.56	1.71	2.08%	1.59%		
Southwest Airlines Co.	5.25	844741AW8	Nts	10/01/2014	BBB-	3.11	2.99	3.17	3.04	2.32	2.39	2.19	3.00	2.71	2.79	2.70	2.69	2.76%	2.73%	
Southwest Airlines Co.	5.12	844741AX6	Nts	03/01/2017	BBB-	4.42	4.34	4.36	4.27	3.71	3.78	3.44	3.76	3.54	4.08	3.89	3.96	3.96%	3.98%	
Southwest Airlines Co.	5.75	844741AY4	Nts	12/15/2016	BBB-	4.03	4.20	4.09	4.00	3.71	3.78	3.07	3.33	3.35	3.60	3.40	3.33	3.66%	3.44%	
Continental Airlines, Inc.	8.75	210795PT1	Nts	12/01/2011	BB-	4.86	4.49	3.77	4.62	3.52	2.74	2.74	7.33	7.79				4.65%		
AMR Corp.	9	001765AC0	Deb	09/15/2016	NR	9.28	9.26	9.87	9.53	9.54	9.48	9.48	11.11	11.85	23.81	49.99	49.99	17.77%	41.26%	
AMR Corp.	10.2	001765AE6	Deb	03/15/2020	NR	10.85	11.13	11.44	11.32	11.86	11.78	11.78	13.23	13.58	21.25	22.85	49.00	16.67%	31.03%	
AMR Corp.	9.88	001765AG1	Deb	06/15/2020	NR	10.73	10.96	11.27	11.16	11.64	11.41	11.41	13.14	13.44	21.37	22.91	49.99	16.62%	31.42%	
AMR Corp.	10	001765AK2	Deb	04/15/2021	NR	10.81	11.03	11.33	11.22	11.68	11.46	11.46	13.00	13.28	20.62	22.04	49.22	16.43%	30.63%	
AMR Corp.	9.75	001765AP1	Deb	08/15/2021	NR	10.54	10.75	11.03	10.89	11.38	11.16	11.16	12.66	12.93	20.04	21.62	49.68	16.15%	30.44%	
AMR Corp.	9.8	001765AQ9	Deb	10/01/2021	NR	10.58	10.80	11.08	10.98	11.42	11.20	11.20	12.79	13.07	20.05	21.63	47.51	16.03%	29.73%	
AMR Corp.	9	001765AU0	Deb	08/01/2012	NR	7.65	7.11	8.88	8.55	8.07	7.88	7.88	7.55	7.89	23.69	49.99	49.99	16.26%	41.22%	
Delta Air Lines, Inc.	9	247361AD0	Deb	05/15/2016	NR	22.57	22.57	22.57	22.57	22.57	22.57	22.57	22.57	22.57	22.57	22.57	22.57	22.57%	22.57%	
Delta Air Lines, Inc.	10.375	247361WG9	Deb	02/01/2011	NR	33.66												33.66%		
Delta Air Lines, Inc.	9.75	247361WH7	Deb	05/15/2021	NR	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28	19.28%	19.28%	
Delta Air Lines, Inc.	9.25	247361XX1	Deb	03/15/2022	NR	17.95	17.95	17.95	17.95	17.95	17.95	17.95	17.95	17.95	17.95	17.95	17.95%	17.95%		
Delta Air Lines, Inc.	10.38	247361XY9	Deb	12/15/2022	NR	20.08	20.08	20.08	20.08	20.08	20.08	20.08	20.08	20.08	20.08	20.08	20.08	20.12%	20.18%	
Delta Air Lines, Inc.	8.3	247361YG7	Nts	12/15/2029	NR	15.85	15.85	15.85	15.85	15.85	15.85	15.85	15.85	15.85	15.85	15.85	15.85	15.85%	15.85%	
United Air Lines	10.85	909279AH4	Eq Tr '91B	02/19/2015	NR	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84	28.84%	28.84%	
United Air Lines	10.36	909279AN1	Eq Tr '91C	11/13/2012	NR							16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22%	16.22%
United Air Lines	10.36	909279AP6	Eq Tr '91D	11/20/2012	NR	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22%	16.22%	
United Air Lines	10.36	909279AQ4	Eq Tr '91E	11/27/2012	NR	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22	16.22%	16.22%	

Counts of data

24 23 22 23 23 25 25 25 24 24 24 24 19 26 24

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

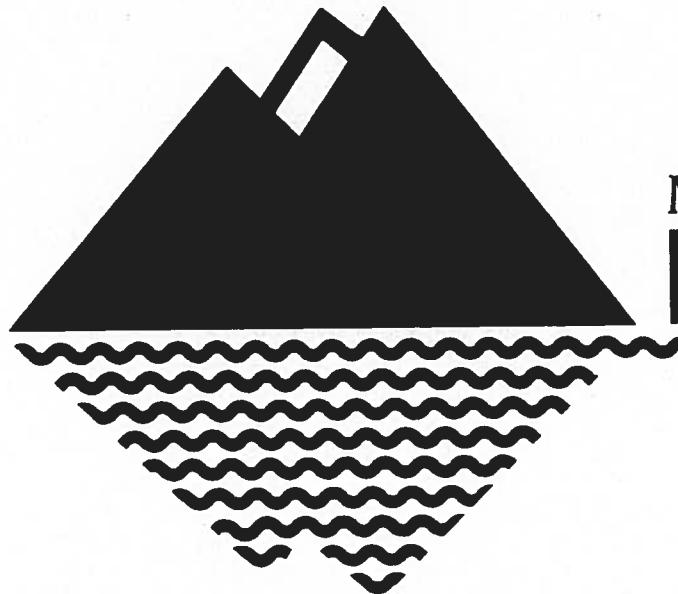
means issuance matured or called

means 20 year plus bond

longest term passenger bonds

20 YEAR PLUS BONDS															
Bond Rating	ALL	Annual	4th Qtr	Freight Only	Annual	4th Qtr	Passenger Only	Annual	4th Qtr	Freight Only	Annual	4th Qtr	Passenger Only	Annual	4th Qtr
AA's	3.54%	2.95%		3.54%	2.95%					5.91%	5.33%		11.15%	10.78%	
BBB's	3.87%	3.65%	4.10%	4.40%	3.78%	3.49%		5.91%	5.33%	6.44%	5.70%				
BB's	4.65%				4.65%										
NR	18.99%	25.57%			18.99%	25.57%							15.85%	15.85%	
ALL	13.77%	18.26%	3.91%	3.91%	15.06%	20.31%	5.91%	5.33%	11.15%	10.78%					
BBB- & Above	3.83%	3.65%	3.91%	3.91%	3.78%	3.49%	5.91%	5.33%	6.44%	5.70%					
BB- & Above	3.92%	3.65%	3.91%	3.91%	3.92%	3.49%	5.91%	5.33%	6.44%	5.70%					

*Investment Grade (BBB- & Above)



Montana Department of
REVENUE

2012 Capitalization Rate Study

Electric Utilities

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study
Industry: Electric Utilities - Regulated
2012 Assessment Year

Equity Measures Calculated:

E/P estimates:

All	Western	
6.66%	6.86%	Yahoo
6.61%	6.60%	Value Line
6.63%	6.73%	Average of E/Ps

Inverse of P/E Ratios:

6.46%	6.69%	Yahoo
6.64%	6.73%	Value Line
6.55%	6.71%	Average of Inverse of the P/E
6.60%	6.32%	Inverse of median P/E, Value Line
6.59%	6.72%	Average of all above except median P/E

Mean = 6.60% 6.64%

Median = 6.61% 6.69%

Equity Measure NUOI = 6.75%

Debt Measures Calculated, Current Yield:

	Annual	4th Qtr	
	5.56%	5.33%	ALL
	5.34%	5.14%	BBB- & Above
	5.36%	5.16%	BB- & Above

Mean = 5.42% 5.21%
 Median = 5.36% 5.16%

Debt Measure = 5.40%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate				
Equity	56.00%	x	6.75%	= 3.78%
Debt	44.00%	x	5.40%	= 2.38%
	100.00%			6.16%
Direct Cap Rate NUOI =				6.25%

Gross Cash Flow / Price:

All	Western	
13.76%	13.34%	Value Line

Equity Measure Gross = 14.00%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)				
Equity	56.00%	x	14.00%	= 7.84%
Debt	44.00%	x	5.40%	= 2.38%
	100.00%			10.22%
Direct Cap Rate GCF =				10.25%

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study
Industry: Electric Utility - Exempt Wholesale Generators
2012 Assessment Year

Equity Measures Calculated:

E/P estimates:

All	B+	
7.77%	7.77%	Yahoo
6.85%	6.37%	Value Line
7.31%	7.07%	Average of E/Ps

Inverse of P/E Ratios:

7.72%	7.72%	Yahoo
7.81%	7.48%	Value Line
7.77%	7.60%	Average of Inverse of the P/E
7.18%	7.49%	Inverse of median P/E, Value Line
7.54%	7.34%	Average of all above except median P/E

Mean = 7.47% 7.37%

Median = 7.72% 7.49%

Equity Measure NUOI = **8.00%**

Debt Measures Calculated, Current Yield:

	Annual	4th Qtr	
	5.56%	5.33%	ALL
	5.34%	5.14%	BBB- & Above
	5.36%	5.16%	BB- & Above

Mean = 5.42% 5.21%
 Median = 5.36% 5.16%

Debt Measure = 5.40%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate					
Equity	52.00%	x	8.00%	=	4.16%
Debt	48.00%	x	5.40%	=	2.59%
	100.00%				6.75%
Direct Cap Rate NUOI =					7.00%

Gross Cash Flow / Price:

All	B+	
21.12%	17.47%	Value Line

Equity Measure Gross = **19.00%**

Industry Market Capital Structure Gross Cash Flow Rate (GCF)					
Equity	52.00%	x	19.00%	=	9.88%
Debt	48.00%	x	5.40%	=	2.59%
	100.00%				12.47%
Direct Cap Rate GCF =					12.50%

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Study

Industry: Electric Utilities

2012 Assessment Year

<u>Equity Measures Calculated:</u>	All	Western	Wholesale Generators
Dividend Growth Model	9.20%	9.65%	10.60%
Capital Asset Pricing Model	7.66%	7.78%	8.39%
Mean =	8.43%	8.71%	9.49%
Median =	8.43%	8.71%	9.49%
Equity Measure FCF =	9.00%	9.15%	10.20%

Debt Measures Calculated, Yield to Maturity:

	ALL DEBT		20 YEAR PLUS DEBT	
	Annual	4th Qtr	Annual	4th Qtr
ALL	3.82%	3.53%	5.34%	4.76%
BBB- & Above	3.65%	3.24%	5.25%	4.66%
BB- & Above	3.67%	3.28%	5.25%	4.67%
Mean =	3.71%	3.35%	5.28%	4.70%
Median =	3.67%	3.28%	5.25%	4.67%

Debt Measure = 3.70%

Yield Cap Rate Free Cash Flow - Electric Utilities				
Equity	56.00%	x	9.15%	= 5.12%
Debt	44.00%	x	3.70%	= 1.63%
	100.00%			6.75%
Weighted Average Cost of Capital (WACC) =				7.00%

Yield Cap Rate Free Cash Flow - Wholesale Generators				
Equity	52.00%	x	10.20%	= 5.30%
Debt	48.00%	x	3.70%	= 1.78%
	100.00%			7.08%
Weighted Average Cost of Capital (WACC) =				7.25%

Where Assumed Growth Rate = Inflation
see appendix for calculation

Growth = 2.05%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Electric Utilities - Regulated
2012 Assessment Year

A Company	B Ticker Symbol	C (VL) Financial Strength	D (VL) Shares	E (YAHOO) Avg. Price Common	F (VL) Book Value Per Share	G Mkt. Value Common	H (VL) Book Value Common	I (VL) Book Value Preferred	J Mkt. Value Preferred	K (VL) Book Value Debt	L Mkt/Book Debt Ratio	M Mkt. Value Debt
MDU Resources Group	MDU	A+	188,800	20.54	14.18	3,878,581	2,677,800	15,000	15,000	1,434,000	1.00	1,434,000
Alliant Energy	LNT	A	110,900	41.06	26.09	4,553,184	2,893,600	243,800	243,800	2,703,400	1.00	2,703,400
OGE Energy	OGE	A	97,600	51.71	23.46	5,046,571	2,289,600	0	0	2,362,900	1.00	2,362,900
Avista Corp	AVA	B++	57,100	24.90	19.72	1,421,505	1,125,800	0	0	1,199,500	1.00	1,199,500
Pinnacle West Capital	PNW	B++	108,800	45.61	33.85	4,961,824	3,683,300	0	0	3,045,800	1.00	3,045,800
Xcel Energy	XEL	B++	482,300	25.73	16.76	12,407,971	8,083,500	105,000	105,000	9,263,100	1.00	9,263,100
NorthWestern Corp	NWE	B++	36,200	33.87	22.66	1,226,094	820,300	0	0	1,096,100	1.00	1,096,100
Black Hills Corp	BKH	B+	39,300	32.25	28.00	1,267,491	1,100,300	0	0	1,186,100	1.00	1,186,100
Great Plains Energy	GXP	B+	135,700	20.57	21.27	2,791,801	2,885,900	39,000	39,000	2,942,700	1.00	2,942,700
Idacorp Inc	IDA	B+	49,400	40.27	31.01	1,989,503	1,532,100	0	0	1,488,300	1.00	1,488,300
Portland General Electric	POR	B+	75,300	24.35	21.14	1,833,806	1,592,000	0	0	1,798,000	1.00	1,798,000
NV Energy	NVE	B	235,300	15.31	14.24	3,601,659	3,350,800	0	0	4,924,100	1.00	4,924,100
PNM Resources	PNM	B	86,700	17.81	17.59	1,544,127	1,525,200	11,500	11,500	1,563,600	1.00	1,563,600
Unisource Energy	UNS	C++	36,500	36.60	22.49	1,335,839	820,800	0	0	1,782,100	1.00	1,782,100

SUMS & AVGS - ALL COMPANIES

47,859,956 34,381,000 414,300 414,300 36,789,700 36,789,700

SUMS & AVGS - B++ & ABOVE COMPANIES

33,495,730 21,573,900 363,800 363,800 21,104,800 21,104,800

SUMS & AVGS - B+ & ABOVE COMPANIES

41,378,331 28,684,200 402,800 402,800 28,519,900 28,519,900

SUMS & AVGS - WESTERN COMPANIES

30,363,724 22,813,800 116,500 116,500 26,250,600 26,250,600

'AVA, BKH, IDA, PNM, PNW, POR, UNS, & NVE

Preferred stock is grouped with debt.

* All Negative values left out of calculations

INDUSTRY MARKET STRUCTURE						
	ALL COMPANIES	B++ COMPANIES	B+ & ABOVE COMPANIES	WESTERN COMPANIES***		
EQUITY	56.00%	47,859,956	61.00%	33,495,730	59.00%	41,378,331
DEBT	44.00%	37,204,000	39.00%	21,468,600	41.00%	28,922,700
TOTAL	100.00%	\$85,063,956	100.00%	54,964,330	100.00%	70,301,031
					100.00%	\$56,730,824

Notes/Rational for Changes to Guideline Companies

* 2012 DPL Inc. Merged with AES and was excluded from the study

Xcel Energy Inc. was added as it is comparable to other utilities

For 2011 Cap Rate/ Tax Year 2012

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Electric Utilities - Regulated
2012 Assessment Year

A	B	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
Company	Ticker Symbol	(YAHOO) EPS 1st 12mo	(YAHOO) E/P	(VL) EPS	(VL) E/P	(VL) CF/S	(VL) CF/P	(YAHOO) P/E	(YAHOO) Inverse of P/E	(VL) P/E	(VL) Inverse of P/E	(VL) Median P/E	(VL) Inverse of Median P/E	(VL) Industry Group	(VL) Beta
				N/E	P/E		R/E		1/T		1/V		1/X		
MDU Resources Group	MDU	1.27	6.18%	N/A	N/A	3.10	15.09%	16.71	5.98%	15.08	6.63%	14.00	7.14%	GASDIVRS	1.00
Alliant Energy	LNT	2.67	6.50%	2.75	6.70%	5.70	13.88%	16.06	6.23%	15.92	6.28%	13.00	7.69%	UTILCENT	0.75
OGE Energy	OGE	3.40	6.58%	3.40	6.58%	6.55	12.67%	16.01	6.25%	16.60	6.02%	14.00	7.14%	UTILCENT	0.80
Avista Corp	AVA	1.75	7.03%	1.79	7.19%	3.75	15.06%	14.59	6.86%	14.18	7.05%	16.00	6.25%	UTILWEST	0.70
Pinnacle West Capital	PNW	3.04	6.67%	2.93	6.42%	6.80	14.91%	15.46	6.47%	14.89	6.72%	14.00	7.14%	UTILWEST	0.70
Xcel Energy	XEL	1.72	6.69%	1.75	6.80%	3.85	14.97%	15.51	6.45%	15.28	6.54%	14.00	7.14%	UTILWEST	0.65
NorthWestern Corp	NWE	2.23	6.58%	2.35	6.94%	NA	NA	15.69	6.37%	N/A	N/A	N/A	N/A	UTILCENT	0.70
Black Hills Corp	BKH	1.46	4.53%	1.23	3.81%	4.85	15.04%	22.66	4.41%	18.24	5.48%	16.00	6.25%	UTILWEST	0.85
Great Plains Energy	GXP	1.20	5.83%	1.30	6.32%	3.55	17.26%	17.79	5.62%	14.61	6.84%	15.00	6.67%	UTILCENT	0.75
Idacorp Inc	IDA	3.60	8.94%	3.66	9.09%	5.55	13.78%	11.46	8.73%	12.95	7.72%	15.00	6.67%	UTILWEST	0.70
Portland General Electric	POR	1.90	7.80%	1.92	7.88%	5.00	20.53%	13.11	7.63%	13.10	7.63%	N/A	N/A	UTILWEST	0.75
NV Energy	NVE	0.86	5.62%	0.83	5.42%	0.54	3.53%	18.31	5.46%	17.29	5.78%	20.00	5.00%	UTILWEST	0.85
PNM Resources	PNM	(0.48)	(2.70%)	0.91	5.11%	0.60	3.37%	NA	N/A	15.69	6.37%	16.00	6.25%	UTILWEST	0.95
Unisource Energy	UNS	2.79	7.62%	2.80	7.65%	6.90	18.85%	13.25	7.55%	13.71	7.29%	17.00	5.88%	UTILWEST	0.75
SUMS & AVGS - ALL COMPANIES			6.66%		6.61%		13.76%		6.46%		6.64%		6.60%		0.78
SUMS & AVGS - B++ & ABOVE COMPANIES			6.60%		6.77%		14.43%		6.37%		6.54%		7.09%		0.76
SUMS & AVGS - B+ & ABOVE COMPANIES			6.67%		6.77%		15.32%		6.45%		6.69%		6.90%		0.76
SUMS & AVGS - WESTERN COMPANIES			6.86%		6.60%		13.34%		6.69%		6.73%		6.32%		0.77

'AVA, BKH, IDA, PNM, PNW, POR, UNS, & NVE
SUMS & AVGS - ALL COMPANIES
SUMS & AVGS - B++ & ABOVE COMPANIES
SUMS & AVGS - B+ & ABOVE COMPANIES
SUMS & AVGS - WESTERN COMPANIES
Preferred stock is grouped with debt.
* All Negative values left out of calculations

Beta of Industry = 0.78
Beta of Western Sector = 0.80

Notes/Rational for Changes to Guideline Companies
* 2012 DPL Inc. Merged with AES and was excluded
Xcel Energy Inc. was added as it is comparable to others
For 2011 Cap Rate/ Tax Year 2012

MONTANA DEPARTMENT OF REVENUE

Support for industry Capital Structure
Industry: Exempt Wholesale Generators
2012 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L	M
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common ExD	Book Value Common	(VL) Book Value Preferred	Mkt. Value Preferred	(VL) Book Value Debt	Mkt/Book Debt Ratio	Mkt Value Debt
Sempra	SRE	A	240,400	52.44	37.55	12,606,676	9,027,000	179,000	179,000	8,980,000	1.00	8,980,000
PPL Corp	PPL	B++	483,400	27.38	16.98	13,237,103	8,210,000	250,000	250,000	12,161,000	1.00	12,161,000
NRG Energy	NRG	B+	247,500	21.79	31.61	5,392,716	7,824,000	248,000	248,000	8,748,000	1.00	8,748,000
Constellation Energy	CEG	B+	199,800	35.93	39.19	7,179,230	7,829,200	190,000	190,000	4,448,800	1.00	4,448,800
AES Corp	AES	B	788,300	11.99	8.21	9,449,418	6,473,000	0	0	16,693,000	1.00	16,693,000
Dynegy Inc. 'A'	DYN	C	121,200	5.10	22.66	618,373	2,746,000	0	0	4,626,000	1.00	4,626,000
SUMS & AVGS - ALL COMPANIES						48,483,516	42,109,200	867,000	867,000	55,656,800		55,656,800
SUMS & AVGS - B++ COMPANIES						13,237,103	8,210,000	250,000	250,000	12,161,000		12,161,000
SUMS & AVGS - B+ & ABOVE COMPANIES						38,415,725	32,890,200	867,000	867,000	34,337,800		34,337,800

These companies have significant amounts of non-utility generation

Preferred stock is grouped with debt.

* All Negative values left out of calculations

Notes/Rational for Changes to Guideline Companies
2012

No Changes

INDUSTRY MARKET STRUCTURE

	ALL COMPANIES	B++ COMPANIES	B+ & ABOVE COMPANIES	
EQUITY	46.00%	48,483,516	52.00%	13,237,103
DEBT	54.00%	56,523,800	48.00%	12,411,000
TOTAL	100.00%	105,007,316	100.00%	25,648,103
				100.00% 73,620,525

MONTANA DEPARTMENT OF REVENUE

Support for industry Capital Structure
Industry: Exempt Wholesale Generators
2012 Assessment Year

A	B	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
Company	Ticker Symbol	(YAHOO) EPS	(YAHOO) E/P	(VL) EPS	(VL) E/P	(VL) CF/S	(VL) CF/P	(YAHOO) P/E	(YAHOO) Inverse of P/E 1/T	(VL) P/E	(VL) Inverse of P/E 1/V	(VL) Median P/E	(VL) Inverse of Median P/E 1/X	(VL) Industry Group	(VL) Beta
		last 12mo	N/E		P/E		R/E								
Sempra	SRE	5.55	10.58%	4.32	8.24%	8.40	16.02%	9.65	10.36%	12.69	7.88%	11.00	9.09%	UTILWEST	0.80
PPL Corp	PPL	2.64	9.64%	2.55	9.31%	4.50	16.43%	11.06	9.04%	10.98	9.11%	14.00	7.14%	UTILEAST	0.65
NRG Energy	NRG	1.15	5.28%	0.70	3.21%	4.55	20.88%	16.23	6.16%	N/A	N/A	N/A	N/A	POWER	1.10
Constellation Energy	CEG	2.01	5.59%	1.70	4.73%	5.95	16.56%	18.76	5.33%	18.30	5.46%	16.00	6.25%	UTILEAST	0.80
AES Corp	AES	(0.21)	(1.75%)	1.05	8.76%	2.70	22.52%	NA	NA	11.38	8.79%	16.00	6.25%	POWER	1.25
Dynegy Inc. 'A'	DYN	(3.56)	(69.78%)	(1.71)	(33.52%)	1.75	34.30%	NA	NA	N/A	N/A	N/A	N/A	GASDIVRS	1.40
SUMS & AVGS - ALL COMPANIES		7.77%			6.85%		21.12%		7.72%		7.81%		7.18%		1.00
SUMS & AVGS - B++ COMPANIES		9.64%			9.31%		16.43%		9.04%		9.11%		7.14%		0.65
SUMS & AVGS - B+ & ABOVE COMPANIES		7.77%			6.37%		17.47%		7.72%		7.48%		7.49%		0.84

These companies have significant amounts of non-utility generation

Beta of industry = 0.90

Preferred stock is grouped with debt.

* All Negative values left out of calculations

Notes/Rational for Changes to Guideline Companies
2012

No Changes

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model (CAPM)
Industry: Electric Utilities
2012 Assessment Year

$$K_E = R_F + \beta (R_M - R_F)$$

	Electric Utilities	Western Utilities	Wholesale Generators
K _E = Cost of Equity	7.66%	7.78%	8.39%
R _F = Risk Free Rate	2.89%	2.89%	2.89%
β = Beta	0.78	0.80	0.90
R _M = Market Rate of Return	9.00%	9.00%	9.00%
R _P = Equity Risk Premium (RM - RF)	6.11%	6.11%	6.11%

Dr. Aswath Damodaran <http://pages.stern.nyu.edu/~adamodar/>
Duff & Phelps BV Wire January 25, 2012 Issue #112-4

12-Jan
Jan-12

6.01%
5.50%

R_m = Investor's Market Rate of Return

Ibbotson, SBBI, Large Company, Average Annual Return, *Arithmetic Average, Ex-Post
Ibbotson, SBBI, Large Company, Average Annual Return, *Geometric Average, Ex-Post
3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante

R _M =	11.80%
R _M =	9.80%
R _M =	8.50%

Mean = 10.03%
Median = 9.80%

R_M = 9.00%

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2011-31 Table 2 December 2011
Rev Rule 2011-31 Table 2

<u>Annual Rates</u>	Short Term - AFR	R _f = 0.45%
	Mid Term - AFR	R _f = 1.69%
	Long Term - AFR	R _f = 3.55%

The ValueLine Investment Survey

U.S. Treasury Securities January 6, 2012

3 Month	R _f = 0.01%
6 Month	R _f = 0.05%
1 Year	R _f = 0.10%

Federal Reserve Statistical Release

Treasury constant Maturities, 2011

Market yield on U.S. Treasury securities, Annual Averages

3-month constant maturity, quoted on investment basis	R _f = 0.02%
6-month constant maturity, quoted on investment basis	R _f = 0.06%
1-year constant maturity, quoted on investment basis	R _f = 0.12%

U.S. Treasury Securities Long-Term December 30, 2011

Mean = 0.67%
Median = 0.10%

Weighted Mean = 0.86%

R_f = 2.89%

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Electric Utilities - Regulated
2012 Assessment Year

$$K_E = D_1 / P_0 + G_A$$

KE= Cost of Equity

D1= Expected Dividends

Po= Current Price Per Share

G= Sustainable Growth

Company Name	Ticker*	Stock Price (Po)	Expected Dividend 1 Year **	Dividend Yield (D1/P0)	Dividend Growth **	Ke 1 Year
Alliant Energy	LNT	41.06	1.80	4.38%	6.00%	10.38%
Avista Corp	AVA	24.90	1.18	4.74%	9.00%	13.74%
Black Hills Corp	BKH	32.25	1.48	4.59%	1.50%	6.09%
Great Plains Energy	GXP	20.57	0.86	4.18%	Nil	
Idacorp Inc	IDA	40.27	1.20	2.98%	4.00%	6.98%
MDU Resources Group	MDU	20.54	0.67	3.26%	3.50%	6.76%
NorthWestern Corp	NWE	33.87				
OGE Energy	OGE	51.71	1.59	3.08%	4.00%	7.08%
PNM Resources	PNM	17.81	0.60	3.37%	7.00%	10.37%
Pinnacle West Capital	PNW	45.61	2.10	4.60%	1.50%	6.10%
Portland General Electric	POR	24.35	1.08	4.43%	3.00%	7.43%
NV Energy	NVE	15.31	0.54	3.53%	11.00%	14.53%
Xcel Energy	XEL	25.73	1.06	4.12%	3.00%	7.12%
Unisource Energy	UNS	36.60	1.76	4.81%	9.00%	13.81%

*Bold denotes primarily western operations

**MDU Adjusted for Electric & Natural Gas Contributions

All Companies In Survey

Weighted Mean= 9.19%

Mean= 9.20%

Median= 7.28%

Cost of Equity - All, (K_E) = 9.20%

Western Companies Only

AVA, BKH, IDA, PNM
PNW, POR, NVE, XEL, UNS

Weighted Mean= 9.63%

Mean= 9.57%

Median= 7.43%

Cost of Equity - Western, (K_E) = 9.65%

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Electric Utilities - Exempt Wholesale Generators
2012 Assessment Year

$$K_E = D_1 / P_0 + G_A$$

K_E= Cost of Equity

D₁= Expected Dividends

P₀= Current Price Per Share

G= Sustainable Growth

Company Name	Ticker	Stock Price (P ₀)	Expected Dividend (D ₁)	Dividend Yield (D ₁ /P ₀)	Dividend Growth (G ₁)	Ke 1 Year
NRG Energy	NRG	19.91	Nil		Nil	
Constellation Energy	CEG	38.31	0.96	2.51%	(4.00%)	(1.49%)
Dynegy	DYN	3.20	Nil		Nil	
PPL Corp	PPL	28.95	1.40	4.84%	3.50%	8.34%
Sempra	SRE	52.67	2.08	3.95%	9.00%	12.95%
AES Corp	AES	11.22	0.17	1.52%	Nil	

Mean = 10.64%

Median = 10.64%

Cost of Equity, (K_E) = 10.60%

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Electric Utilities
2012 Assessment Year

Ticker	Company		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P- E	EPS Ist 12 mo
AES	AES Corp.	high low	\$13.27 \$12.19	\$12.92 \$11.99	\$13.40 \$12.09	\$13.50 \$12.42	\$13.42 \$12.30	\$13.00 \$12.03	\$13.20 \$12.16	\$12.43 \$9.22	\$11.15 \$9.69	\$11.70 \$9.00	\$12.14 \$10.80	\$12.24 \$11.43	\$11.22	\$11.99	NA	(0.21)
AVA	Avista Corp	high low	\$23.49 \$22.57	\$23.69 \$21.95	\$23.24 \$21.78	\$24.56 \$22.81	\$25.50 \$24.00	\$25.83 \$23.89	\$26.53 \$25.00	\$25.56 \$21.13	\$25.50 \$22.81	\$26.35 \$23.14	\$25.26 \$23.57	\$26.31 \$24.74	\$24.90	\$24.13	14.59	1.75
BKH	Black Hills Corp	high low	\$31.52 \$30.06	\$31.87 \$29.76	\$33.64 \$30.45	\$34.85 \$32.16	\$34.84 \$29.92	\$31.06 \$28.12	\$31.08 \$29.75	\$30.75 \$25.83	\$32.22 \$29.30	\$34.47 \$29.10	\$33.77 \$30.01	\$34.41 \$31.75	\$32.25	\$31.28	22.66	1.46
DPL	DPL Inc	high low		NOT AVAILABLE MERGED WITH AES 11/28/11														
EDE	Empire Dist Elec	high low	\$22.40 \$21.46	\$21.95 \$21.20	\$21.95 \$20.70	\$22.45 \$21.21	\$23.26 \$18.01	\$19.56 \$18.54	\$20.77 \$19.16	\$21.15 \$18.10	\$20.82 \$19.20	\$20.74 \$18.41	\$21.05 \$19.34	\$21.40 \$20.12	\$20.18	\$20.54	15.85	1.31
EE	EI Paso Electric	high low	\$28.17 \$26.89	\$28.11 \$26.65	\$30.68 \$27.37	\$31.07 \$29.09	\$31.17 \$29.68	\$32.40 \$29.29	\$34.05 \$32.39	\$35.65 \$30.69	\$34.83 \$29.82	\$33.20 \$30.29	\$34.85 \$31.06	\$35.71 \$32.48	\$32.93	\$31.07	13.69	2.49
GEN	GenOn Energy, Inc.	high low	\$4.35 \$3.71	\$4.28 \$3.79	\$4.29 \$3.62	\$3.96 \$3.51	\$4.10 \$3.56	\$4.07 \$3.66	\$4.14 \$3.75	\$3.97 \$2.60	\$3.29 \$2.72	\$3.18 \$2.47	\$3.05 \$2.46	\$2.78 \$2.30	\$2.71	\$3.48	NA	(1.02)
GXP	Great Plains Energy	high low	\$20.14 \$19.10	\$20.14 \$18.97	\$20.20 \$18.90	\$20.75 \$19.58	\$21.21 \$20.04	\$21.20 \$20.22	\$21.28 \$19.81	\$20.41 \$16.34	\$20.78 \$18.38	\$21.33 \$18.23	\$21.63 \$19.55	\$22.09 \$20.61	\$20.57	\$20.04	17.79	1.2
IDA	Idacorp Inc	high low	\$38.72 \$36.53	\$38.37 \$37.12	\$38.30 \$36.14	\$39.39 \$37.65	\$40.38 \$37.97	\$39.62 \$37.97	\$40.71 \$39.04	\$39.74 \$33.88	\$39.98 \$35.33	\$41.97 \$37.26	\$41.67 \$38.25	\$42.66 \$39.83	\$40.27	\$38.69	11.46	3.6
LNT	Alliant Energy	high low	\$37.76 \$36.78	\$39.40 \$37.04	\$40.68 \$37.70	\$39.77 \$37.84	\$41.17 \$38.72	\$42.14 \$39.18	\$42.09 \$38.98	\$40.67 \$33.91	\$40.82 \$37.90	\$41.90 \$36.82	\$42.44 \$39.40	\$44.49 \$41.29	\$41.06	\$39.54	16.06	2.67
MDU	MDU Resources Group	high low	\$21.43 \$20.11	\$21.59 \$20.50	\$23.00 \$21.07	\$23.98 \$22.49	\$24.05 \$22.54	\$23.78 \$21.47	\$23.28 \$21.12	\$21.98 \$18.25	\$21.63 \$18.61	\$21.70 \$18.00	\$21.47 \$19.65	\$22.19 \$20.25	\$20.54	\$21.42	16.71	1.27
NI	NiSource Inc	high low	\$18.93 \$17.71	\$19.25 \$18.31	\$19.61 \$18.20	\$19.49 \$18.62	\$20.67 \$19.22	\$20.29 \$19.03	\$21.37 \$19.95	\$21.51 \$17.95	\$22.91 \$20.28	\$23.00 \$20.31	\$22.93 \$21.17	\$23.97 \$21.67	\$22.18	\$20.26	20.94	1.09
NWE	NorthWestern Corp	high low	\$29.46 \$28.18	\$29.97 \$27.38	\$30.57 \$28.23	\$32.62 \$29.37	\$33.24 \$31.84	\$33.14 \$31.50	\$34.11 \$31.27	\$34.17 \$28.68	\$34.11 \$30.96	\$35.51 \$30.44	\$35.05 \$32.23	\$36.61 \$33.38	\$33.87	\$31.75	15.69	2.23
OGE	OGE Energy	high low	\$46.60 \$44.69	\$48.90 \$45.84	\$50.61 \$47.28	\$53.50 \$50.03	\$53.33 \$49.54	\$51.17 \$47.64	\$52.15 \$49.37	\$51.09 \$40.56	\$50.47 \$45.80	\$53.62 \$45.70	\$53.05 \$49.00	\$57.17 \$51.70	\$51.71	\$49.53	16.01	3.4
PNM	PNM Resources	high low	\$13.73 \$12.97	\$13.81 \$12.96	\$15.16 \$13.40	\$15.42 \$14.46	\$16.57 \$15.00	\$17.10 \$15.66	\$17.14 \$14.98	\$15.20 \$12.75	\$16.93 \$13.39	\$18.70 \$15.81	\$19.17 \$17.10	\$19.09 \$16.99	\$17.81	\$15.56	NA	(0.48)

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Electric Utilities
2012 Assessment Year

														Yahoo				
Ticker	Company		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P- E	EPS Ist 12 mo
PNW	Pinnacle West Capital	high low	\$42.26 \$40.71	\$42.42 \$40.70	\$44.07 \$41.23	\$43.47 \$41.93	\$45.64 \$43.54	\$45.22 \$42.54	\$45.15 \$41.86	\$44.49 \$37.28	\$45.08 \$41.43	\$47.36 \$40.87	\$47.45 \$43.97	\$48.87 \$45.11	\$45.61	\$43.44	15.46	3.04
POR	Portland General Electric	high low	\$22.63 \$21.64	\$23.45 \$22.42	\$24.00 \$23.00	\$25.00 \$23.30	\$26.00 \$24.73	\$26.05 \$24.78	\$26.00 \$24.58	\$25.08 \$21.29	\$24.72 \$22.85	\$25.18 \$22.27	\$25.39 \$23.48	\$25.54 \$24.26	\$24.35	\$24.07	13.11	1.9
PSD	Puget Energy	high low	NOT AVAILABLE NO LONGER TRADED															
NVE	NV Energy fka Sierra Pacific	high low	\$14.76 \$13.89	\$15.04 \$14.38	\$14.97 \$14.24	\$15.32 \$14.55	\$15.96 \$15.10	\$15.91 \$14.96	\$15.71 \$14.83	\$15.14 \$12.31	\$15.05 \$13.63	\$16.25 \$13.65	\$16.11 \$14.33	\$16.61 \$14.89	\$15.31	\$14.90	18.31	0.86
AES	AES Corp	high low	\$13.27 \$12.19	\$12.92 \$11.99	\$13.40 \$12.09	\$13.50 \$12.42	\$13.42 \$12.30	\$13.00 \$12.03	\$13.20 \$12.16	\$12.43 \$9.22	\$11.15 \$9.69	\$11.70 \$9.00	\$12.14 \$10.80	\$12.24 \$11.43	\$11.22	\$11.99	(11.60)	-1.02
CPN	Calpine Corp	high low	\$14.90 \$13.42	\$15.13 \$14.06	\$16.25 \$14.43	\$16.89 \$15.75	\$17.10 \$15.28	\$16.28 \$15.00	\$17.08 \$15.74	\$16.45 \$12.70	\$16.19 \$13.67	\$15.36 \$12.79	\$15.63 \$14.29	\$16.68 \$14.77	\$14.92	\$15.24	NA	(0.41)
CMS	CMS Energy	high low	\$19.78 \$18.50	\$19.77 \$18.70	\$19.92 \$18.45	\$19.86 \$18.70	\$20.46 \$19.58	\$20.00 \$19.14	\$20.22 \$19.09	\$19.78 \$16.96	\$20.83 \$18.64	\$21.58 \$18.62	\$21.21 \$19.57	\$22.37 \$20.40	\$20.63	\$19.67	14.07	1.52
D	Dominion Resources	high low	\$44.00 \$42.06	\$45.63 \$43.18	\$46.56 \$42.91	\$46.50 \$43.27	\$48.55 \$46.24	\$48.52 \$46.55	\$50.45 \$47.81	\$50.67 \$44.50	\$51.44 \$46.70	\$52.35 \$48.21	\$52.68 \$49.06	\$53.59 \$50.00	\$50.98	\$47.56	19.84	2.61
DTE	DTE Energy	high low	\$47.16 \$45.17	\$47.55 \$46.02	\$49.36 \$46.43	\$50.58 \$48.06	\$52.78 \$50.61	\$51.58 \$48.33	\$51.83 \$49.44	\$50.79 \$43.22	\$52.00 \$47.82	\$52.82 \$47.03	\$52.68 \$49.06	\$55.28 \$51.31	\$51.36	\$49.45	12.69	4.2
DUK	Duke Energy	high low	\$18.26 \$17.36	\$18.27 \$17.59	\$18.48 \$17.43	\$18.72 \$17.95	\$19.50 \$18.50	\$18.92 \$18.28	\$19.23 \$18.43	\$18.96 \$16.87	\$20.21 \$18.33	\$20.73 \$19.17	\$21.02 \$19.58	\$22.12 \$20.45	\$20.51	\$18.93	15.42	1.38
DYN	Dynegy Inc.	high low	\$6.30 \$5.53	\$6.28 \$5.55	\$6.05 \$5.32	\$6.48 \$5.48	\$6.67 \$5.58	\$6.28 \$5.67	\$6.92 \$5.65	\$5.88 \$3.54	\$5.99 \$4.11	\$4.10 \$3.00	\$4.13 \$2.22	\$3.32 \$2.40	\$3.20	\$5.10	NA	(3.56)
EIX	Edison Intl	high low	\$39.20 \$36.14	\$37.48 \$35.18	\$38.38 \$35.12	\$39.59 \$36.54	\$40.15 \$38.53	\$39.61 \$38.13	\$39.25 \$37.70	\$38.40 \$32.64	\$38.77 \$35.06	\$41.57 \$35.63	\$41.24 \$37.51	\$41.57 \$38.38	\$39.32	\$37.99	13.55	2.95
NRG	NRG Energy	high low	\$21.70 \$19.37	\$21.36 \$19.22	\$21.95 \$19.09	\$24.24 \$21.05	\$25.54 \$23.45	\$24.85 \$22.74	\$25.66 \$23.26	\$24.81 \$19.98	\$24.12 \$21.09	\$22.16 \$18.65	\$22.61 \$18.71	\$19.85 \$17.47	\$19.91	\$21.79	16.23	1.15
PCG	PG&E Corp	high low	\$47.99 \$45.91	\$46.91 \$44.81	\$46.96 \$41.45	\$46.47 \$43.60	\$46.71 \$42.60	\$43.44 \$41.18	\$43.34 \$41.33	\$42.48 \$37.57	\$43.82 \$40.02	\$43.56 \$40.32	\$42.63 \$36.84	\$41.80 \$37.83	\$40.50	\$42.90	15.74	2.53
PPL	PPL Corp	high low	\$26.98 \$25.33	\$26.00 \$24.50	\$26.18 \$24.10	\$27.56 \$25.23	\$28.38 \$27.04	\$28.21 \$26.82	\$28.73 \$27.33	\$28.93 \$25.00	\$29.61 \$27.55	\$29.78 \$27.00	\$30.27 \$28.28	\$30.11 \$28.28	\$28.95	\$27.38	11.06	2.64

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Electric Utilities
2012 Assessment Year

														Yahoo				
Ticker	Company		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P- E	EPS Ist 12 mo
SO	Southern Co	high	\$38.79	\$38.19	\$38.62	\$39.05	\$40.87	\$40.41	\$40.87	\$41.41	\$43.09	\$43.95	\$43.97	\$46.69	\$43.58	\$40.19	18.53	2.44
		low	\$37.55	\$37.05	\$36.51	\$37.43	\$38.85	\$39.05	\$39.43	\$35.73	\$40.31	\$41.00	\$42.11	\$43.74				
SRE	Sempra Energy	high	\$52.92	\$53.60	\$54.44	\$55.22	\$55.97	\$55.12	\$53.68	\$52.66	\$53.76	\$55.58	\$54.37	\$55.61	\$52.67	\$52.44	9.65	5.55
		low	\$51.18	\$51.71	\$50.32	\$52.12	\$53.92	\$51.53	\$50.48	\$44.78	\$49.16	\$48.38	\$50.53	\$51.53				
TE	TECO Energy	high	\$18.52	\$18.77	\$18.82	\$19.29	\$19.66	\$19.18	\$19.38	\$18.78	\$18.65	\$18.97	\$19.22	\$19.30	\$18.16	\$18.29	14.55	1.28
		low	\$17.83	\$17.59	\$17.47	\$18.35	\$18.51	\$18.20	\$18.31	\$15.82	\$16.75	\$16.15	\$17.38	\$17.96				
UNS	Unisource Energy	high	\$36.65	\$36.72	\$37.47	\$37.32	\$38.71	\$37.94	\$38.55	\$38.01	\$38.10	\$39.25	\$37.49	\$38.00	\$36.60	\$36.55	13.25	2.79
		low	\$35.27	\$35.50	\$34.30	\$35.27	\$36.29	\$35.96	\$36.67	\$32.96	\$35.85	\$34.28	\$34.62	\$35.95				
XEL	Xcel Energy	high	\$24.14	\$24.00	\$24.67	\$24.37	\$25.39	\$24.78	\$24.75	\$24.72	\$25.60	\$26.33	\$26.36	\$27.78	\$25.73	\$24.43	15.51	1.72
		low	\$23.26	\$23.40	\$23.17	\$23.38	\$24.10	\$23.74	\$23.66	\$21.20	\$23.55	\$23.48	\$24.82	\$25.59				
CEG	Constellation Energy	high	\$33.19	\$32.97	\$32.87	\$36.64	\$37.85	\$38.09	\$40.22	\$39.20	\$40.13	\$40.20	\$40.97	\$40.38	\$38.31	\$35.93	18.76	2.01
		low	\$30.47	\$29.94	\$29.70	\$30.92	\$35.50	\$35.99	\$37.79	\$33.84	\$37.18	\$35.50	\$37.80	\$35.03				

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR			
Tennessee Valley Authority	6.75	880591CJ9	Global Pwr Bonds '95E	11/1/2025	AAA	5.40	5.40	5.37	5.35	5.23	5.35	5.16	4.93	4.83	4.93	4.93	4.73	5.13%	4.86%			
Tennessee Valley Authority	6.25	880591CU4	Pwr Bonds '97E	12/15/2017	AAA	5.24	5.26	5.27	5.20	5.13	5.17	5.07	4.97	4.96	4.99	4.99	4.91	5.10%	4.96%			
Tennessee Valley Authority	6	880591CW0	Global Pwr Bonds '98C	3/15/2013	AAA	5.41	5.44	5.47	5.47	5.47	5.50	5.51	5.53	5.56	5.57	5.57	5.61	5.51%	5.58%			
Tennessee Valley Authority	7.125	880591DM1	Global Pwr Bonds '00G	5/1/2030	AAA	5.56	5.48	5.46	5.41	5.32	5.48	5.26	4.93	4.70	4.83	4.83	4.68	5.16%	4.78%			
Tennessee Valley Authority	4.88	880591DS8	Global Pwr Bonds '01D	12/15/2016	AAA	4.38	4.40	4.39	4.35	4.27	4.31	4.23	4.16	4.15	4.17	4.17	4.15	4.26%	4.16%			
Tennessee Valley Authority	4.7	880591DV1	Pwr Bonds '03 B'	7/15/2033	AAA	4.86	4.77	4.79	4.72	4.60	4.73	4.59	4.29	3.99	4.19	4.19	3.98	4.48%	4.12%			
Tennessee Valley Authority	4.75	880591DW9	Pwr Bonds '03C	8/1/2013	AAA	4.35	4.38	4.39	4.38	4.37	4.38	4.39	4.39	4.41	4.42	4.42	4.45	4.39%	4.43%			
Tennessee Valley Authority	4.38	880591DY5	Global Pwr Bonds '05B	6/15/2015	AAA	3.99	4.00	4.00	3.97	3.94	3.96	3.91	3.87	3.89	3.89	3.89	3.90	3.93%	3.89%			
Madison Gas & Electric	7.7	557497AL8	1st	2/15/2028	AA-	7.51	7.51	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.51	7.52	7.52	7.52%			
Madison Gas & Elec Co MTN BE	7.12	557440AB3	Tranche # Tr 00002	4/1/2032	AA-	6.42	6.36	6.30	6.27	6.08	6.10	5.92	5.59	5.25	5.37	5.37	5.17	5.85%	5.30%			
Madison Gas & Elec Co MTN BE	5.26	557440AC1	MTN	9/29/2017	AA-	4.89	4.92	4.87	4.86											4.46	4.80%	4.46%
Alabama Power Co.	5.5	010392D28	Sr Nts 'Q'	10/15/2017	A	4.89	4.89	4.91	4.91	4.80	4.73	4.73	4.64	4.62	4.68	4.64	4.64	4.76	4.65%			
Alabama Power Co.	5.88	010392E80	Sr Nts 'S'	12/1/2022	A	5.25	5.27	5.31	5.29	5.15	5.11	5.11	4.82	4.71	4.89	4.75	4.72	5.03%	4.79%			
Alabama Power Co.	5.7	010392EC8	Sr Nts 'T'	2/15/2033	A	5.54	5.48	5.53	5.50	5.28	5.25	5.25	4.81	4.58	4.82	4.56	4.54	5.10%	4.64%			
Alabama Power Co.	5.6	010392EE4	Sr Nts 'V'	3/15/2033	A	5.58	5.52	5.57	5.55	5.37	5.29	5.29	4.94	4.58	4.95	4.68	4.66	5.17%	4.76%			
Alabama Power Co.	5.12	010392EK0	Sr Nts 'Z'	2/15/2019	A	4.76	4.78	4.76	4.75	4.65	4.61	4.61	4.43	4.34	4.46	4.37	4.35	4.57%	4.39%			
Alabama Power Co.	5.75	010392EQ7	Sr InsurQtrlyNts'EE'	1/15/2036	A	5.98	5.89	5.85	5.82	5.83	5.79	5.79	5.74	5.74	5.74	5.75	5.75	5.81%	5.75%			
Alabama Power Co.	5.2	010392ER2	Sr Nts 'FF'	1/15/2016	A	4.66	4.70	4.69	4.68	4.61	4.57	4.57	4.51	4.52	4.57	4.55	4.55	4.60%	4.56%			
Alabama Power Co.	5.55	010392EW4	Sr Nts '07A	2/1/2017	A	4.98	4.99	5.01	5.00	4.91	4.84	4.84	4.77	4.78	4.84	4.80	4.80	4.88%	4.81%			
Alabama Power Co.	6	010392EX2	Sr InsurMthly Nts '07C	10/15/2037	A	6.00	5.97	6.02	5.99	5.99	5.95	5.95	5.98	5.95	5.97	5.95	5.93	5.97%	5.95%			
Alabama Power Co.	4.85	010392EY0	Sr Nts '07D	12/15/2012	A	4.53	4.53	4.55	4.56	4.56	4.56	4.57	4.57	4.60	4.63	4.64	4.65	4.66	4.59%	4.65%		
Alabama Power Co.	6.12	010392EZ7	Sr Nts '08A	5/15/2038	A	5.61	5.57	5.60	5.58	5.37	5.33	5.33	4.87	4.62	4.84	4.58	4.60	5.16%	4.67%			
Detroit Edison Co.	5.2	250847DT4	Sr Nts	10/15/2012	A	4.87	4.89	4.91	4.90	4.91	4.93	4.94	4.95	4.98	4.99	4.99	5.02	4.94%	5.00%			
Detroit Edison Co.	6.35	250847DU1	Sr Nts 'D'	10/15/2032	A	5.75	5.66	5.78	5.79	5.61	5.72	5.55	5.29	4.99	5.07	5.07	4.90	5.43%	5.01%			
Detroit Edison Co.	5.4	250847DV9	Sr Nts 'D'	8/1/2014	A	4.94	4.98	4.89	4.88	4.85	4.86	4.84	4.85	4.89	4.90	4.90	4.91	4.89%	4.90%			
Detroit Edison Co.	4.8	250847DX5	Sr(Sec)Nts'AR'	2/15/2015	A	4.40	4.44	4.45	4.45	4.40	4.41	4.37	4.31	4.33	4.34	4.34	4.33	4.38%	4.34%			
Detroit Edison Co.	5.45	250847DZ0	Sr(Sec)Nts'BR'	2/15/2035	A	5.50	5.41	5.46	5.43	5.24	5.36	5.18	4.91	4.60	4.82	4.51	5.10%	4.72%				
Detroit Edison Co.	5.7	250847EA4	Sr(Sec)Nts'E'	10/1/2037	A	5.56	5.47	5.52	5.49	5.29	5.41	5.19	4.90	4.61	4.57	4.55	5.09%	4.56%				
Duke Energy Corp.	5.3	264395EM4	1st & Ref	10/1/2015	A	4.70	4.74	4.75	4.73	4.67	4.70	4.62	4.61	4.62	4.64	4.64	4.65	4.67%	4.64%			
Florida Power & Light	4.85	341081EN3	1st	2/1/2013	A	4.53	4.54	4.56	4.56	4.56	4.57	4.57	4.58	4.60	4.62	4.62	4.64	4.58%	4.63%			
Florida Power & Light	5.85	341081EP8	1st	2/1/2033	A	5.51	5.46	5.54	5.48	5.28	5.41	5.24	4.99	4.78	4.74	4.74	4.64	5.15%	4.71%			
Florida Power & Light	5.625	341081EQ9	1st	4/1/2034	A	5.41	5.38	5.47	5.41	5.20	5.34	5.10	4.84	4.66	4.59	4.55	5.04%	4.58%				
Florida Power & Light	5.95	341081ER4	1st	10/1/2033	A	5.50	5.44	5.56	5.51	5.30	5.43	5.14	4.93	4.76	4.69	4.65	5.13%	4.68%				
Florida Power & Light	4.95	341081ET0	1st	6/1/2035	A	5.21	5.09	5.24	5.18	4.97	5.10	4.86	4.60	4.42	4.38	4.38	4.30	4.81%	4.35%			
Florida Power & Light	5.4	341081EU7	1st Mtg Bd	9/1/2035	A	5.30	5.28	5.41	5.31	5.08	5.21	5.04	4.76	4.54	4.50	4.50	4.49	4.95%	4.50%			
Florida Power & Light	5.65	341081EV5	1st	2/1/2037	A	5.40	5.34	5.47	5.41	5.19	5.33	5.09	4.80	4.61	4.54	4.54	4.49	5.02%	4.52%			
Florida Power & Light	6.2	341081EX1	1st	6/1/2036	A	5.53	5.47	5.60	5.54	5.32	5.46	5.24	4.93	4.75	4.67	4.67	4.66	5.15%	4.67%			
Florida Power & Light	5.85	341081EY9	1st	5/1/2037	A	5.47	5.39	5.48	5.45	5.23	5.41	5.13	4.84	4.65	4.57	4.57	4.60	5.07%	4.58%			
Florida Power Corp.	5.9	341099CB3	1st	3/1/2033	A	5.66	5.58	5.64	5.62	5.43	5.54	5.37	5.10	4.83	4.82	4.82	4.68	4.68	5.26%	4.77%		
Florida Power Corp.	4.8	341099CC1	1st	3/1/2013	A	4.48	4.50	4.52	4.52	4.51	4.51	4.52	4.54	4.56	4.57	4.57	4.59	4.53%	4.58%			
Florida Power Corp.	5.8	341099CG2	1st Mtg Bd	9/15/2017	A	5.08	5.14	5.11	5.09	4.97	4.99	4.90	4.85	4.87	4.85	4.85	4.83	4.96%	4.84%			
Florida Power Corp.	6.35	341099CH0	1st	9/15/2037	A	5.66	5.64	5.67	5.63	5.59	5.74	5.29	5.33	5.06	4.84	4.84	4.94	5.33%	4.80%			
Georgia Power Co.	5.125	373334FN6	Sr Nts 'K'	11/15/2012	A	4.77	4.79	4.81	4.82	4.83	4.85	4.86	4.87	4.90	4.91	4.92	4.94	4.86%	4.92%			
Georgia Power Co.	5.75	373334FS5	Sr Nts 'N'	4/15/2023	A	5.25	5.27	5.24	5.22	5.07	5.17	5.04	4.82	4.72	4.83	4.69	4.66	5.00%	4.73%			
Georgia Power Co.	4.9	373334FT3	Sr Nts 'Q'	9/15/2013	A	4.46	4.48	4.50	4.51	4.51	4.54	4.54	4.54	4.56	4.57	4.58	4.59	4.53%	4.58%			
Georgia Power Co.	5.8	373334FZ9	Sr Nts 'Y'	4/15/2035	A	6.00	5.95	6.00	5.97	5.77	5.89	5.70	5.35	5.02	5.21	4.92	5.13	5.58%	5.09%			
Georgia Power Co.	5.25	373334GA3	Sr Nt Ser Z	12/15/2015	A	4.67	4.72	4.73	4.72	4.65	4.64	4.58	4.59	4.62	4.60	4.57	4.62	4.64%	4.60%			
Georgia Power Co.	5.65	373334GC9	Sr Nts '07A	3/1/2037	A	5.47	5.46	5.62	5.56	5.35	5.44	5.25	4.90	4.65	4.76	4.51	4.55	5.13%	4.61%			
Georgia Power Co.	5.7	373334GE5	Sr Nts '07B	6/1/2017	A	5.00	5.04	5.07	5.04	4.95	4.98	4.87	4.82	4.86	4.86	4.80	4.80	4.92%				
Gulf Power Co.	4.35	402479B5	Sr Nts 'G'	7/15/2013	A	4.11	4.13	4.14	4.14	4.14	4.14	4.14	4.15	4.15	4.16	4.17	4.17	4.18	4.15%	4.17%		
Gulf Power Co.	5.65	402479BW8	Sr Nts 'L'	9/1/2035	A	6.08	5.80	5.85	5.82	5.62	5.74	5.55	5.20	4.77	4.99	4.87	5.23	5.46%	5.03%			
Gulf Power Co.	5.3	402479BX6	Sr Nts 'M'	12/1/2016	A	4.76	4.81	4.83	4.82	4.74	4.75	4.67	4.73	4.75	4.77	4.73	4.73	4.76%	4.74%			
Northern IllinoisGas	6.58	665228BQ4	1st	2/15/2028	A	6.22	6.17	6.19	6.17	6.01	6.11	5.96	5.66	5.36	5.47	5.47	5.29	5.84%	5.41%			
Northern Sts Pwr (Minn)	7.2	665228BV3	1st	5/15/2016	A	6.02	6.07	6.09	6.07	5.98	6.00	5.92	5.86	5.89	5.91	5.91	5.90	5.97%	5.91%			
Northern Sts Pwr (Minn)	7.125	665772BN8	1st	7/1/2025	A	5.90	5.89	5.86	5.81	5.63	5.75	5.56	5.32	5.59	5.18	5.18	5.12	5.57%	5.16%			
Northern Sts Pwr (Minn)	6.5	665772BQ1	1st	3/1/2028	A	5.74	5.70	5.56	5.54	5.39	5.49	5.34	5.07	4.95	4.97	4.97	4.81	5.29%	4.92%			
Northern Sts Pwr (Minn)	8																					

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Potomac Electric Power	5.75	737679CY4	Sr Nts	4/15/2034	A	5.62	5.53	5.72	5.70	5.50	5.62	5.44	5.14	4.92	5.04	5.04	4.83	5.34%	4.97%	
Potomac Electric Power	5.4	737679CZ1	Sr Nts	6/1/2035	A	5.52	5.43	5.44	5.42	5.40	5.52	5.34	5.03	4.81	4.93	4.93	4.72	5.21%	4.86%	
Public Serv. Colorado	5.5	744448BX8	1st Coll Tr Ser 15	4/1/2014	A	4.95	4.97	5.00	5.00	4.97	4.94	4.92	4.92	4.95	4.96	4.96	4.98	4.96%	4.97%	
South Carolina Electric & Gas Co.	7.12	837004BC3	1st	6/15/2013	A	6.31	6.35	6.39	6.40	6.41	6.43	6.45	6.47	6.52	6.55	6.55	6.60	6.45%	6.57%	
South Carolina Electric & Gas Co.	6.62	837004BV1	1st	2/1/2032	A	5.83	5.74	5.79	5.77	5.59	5.70	5.50	5.22	5.05	5.13	5.13	5.11	5.45%	5.12%	
South Carolina Electric & Gas Co.	5.8	837004BW9	1st	1/15/2033	A	5.60	5.51	5.56	5.54	5.35	5.47	5.23	4.94	4.80	4.89	4.89	4.69	5.21%	4.82%	
South Carolina Electric & Gas Co.	5.3	837004BX7	1st	5/15/2033	A	5.45	5.36	5.41	5.39	5.20	5.31	5.04	4.76	4.65	4.73	4.73	4.53	5.05%	4.66%	
South Carolina Electric & Gas Co.	5.25	837004BY5	1st	11/1/2018	A	4.78	4.76	4.80	4.82	5.22	5.33	4.61	4.51	4.47	4.51	4.51	4.47	4.73%	4.50%	
South Carolina Electric & Gas Co.	5.25	837004BZ2	1st	3/1/2035	A	5.52	5.42	5.47	5.45	5.22	5.33	5.09	4.79	4.77	4.79	4.79	4.65	5.11%	4.74%	
Southern California Edison Co.	5	842400ER0	1st & Ref '04A	1/15/2014	A	4.55	4.58	4.60	4.58	4.56	4.57	4.56	4.58	4.60	4.60	4.60	4.62	4.58%	4.61%	
Southern California Edison Co.	6	842400ES8	1st & Ref '04B	1/15/2034	A	5.58	5.49	5.49	5.52	5.33	5.43	5.20	4.97	4.67	4.66	4.66	4.65	5.14%	4.66%	
Southern California Edison Co.	5	842400EY5	1st & Ref'05A	1/15/2016	A	4.50	4.54	4.56	4.56	4.46	4.47	4.41	4.38	4.39	4.41	4.41	4.38	4.46%	4.40%	
Southern California Edison Co.	5.55	842400EZ2	1st & Ref'05B	1/15/2036	A	5.45	5.36	5.41	5.39	5.19	5.30	5.06	4.82	4.54	4.60	4.60	4.49	5.02%	4.56%	
Southern California Edison Co.	5.35	842400FA6	1st & Ref'05E	7/15/2035	A	5.40	5.31	5.36	5.32	5.12	5.25	5.01	4.78	4.50	4.55	4.58	4.45	4.97%	4.53%	
Southern California Edison Co.	5.62	842400FC2	1st & Ref'06A	2/1/2036	A	5.47	5.38	5.43	5.41	5.23	5.33	5.08	4.84	4.56	4.62	4.62	4.54	5.04%	4.59%	
Southern California Edison Co.	5.55	842400FF5	1st & Ref'06E	1/15/2037	A	5.45	5.36	5.45	5.38	5.18	5.30	5.05	4.81	4.52	4.58	4.58	4.50	5.01%	4.55%	
Wisconsin Public Service	7.125	976843AX0	1st	7/1/2023	A	7.04	7.04	7.05	7.05	7.07	7.07	7.07	7.07	7.07	7.07	7.06	7.06	7.06	7.06%	
Wisconsin Public Service	4.875	976843BC5	Sr(Sec)Nts	12/1/2012	A	4.57	4.59	4.61	4.61	4.52	4.63	4.64	4.65	4.67	4.68	4.68	4.70	4.64%	4.69%	
Wisconsin Public Service	4.8	976843BD3	Sr(Sec)Nts	12/1/2013	A	4.41	4.44	4.45	4.45	4.45	4.46	4.43	4.43	4.45	4.46	4.46	4.48	4.45%	4.47%	
Wisconsin Public Service	5.55	976843BE1	Sr(Sec)Nts	12/1/2036	A	5.83	5.77	5.79	5.50	5.22	5.34	5.22	4.87	4.51	4.68	4.68	4.60	5.17%	4.65%	
Avista Corp.	5.45	05379BAH0	1st	12/1/2019	A-															
Avista Corp.	6.25	05379BAK3	1st Mtg Bd	12/1/2035	A-															
Avista Corp.	5.7	05379BAM9	1st	7/1/2037	A-	5.99	5.93	5.94	5.92	5.71	5.67	5.67	5.22	4.86	5.12	4.82	4.80	5.47%	4.91%	
CenterPoint Energy Houston	5.7	15189XAC2	Gen Mtge'J2'	3/15/2013	A-	5.26	5.23	5.25	5.26	5.26	5.27	5.27	5.32	5.35	5.38	5.38	5.43	5.31%	5.40%	
CenterPoint Energy Houston	6.95	15189XAD0	Gen Mtge'K2'	3/15/2033	A-	6.06	6.01	5.91	5.89	5.71	5.67	5.67	5.37	5.24	5.30	5.30	5.09	5.60%	5.23%	
CenterPoint Energy Houston	5.75	15189XAG3	Gen Mtge'M2'	1/15/2014	A-	5.18	5.23	5.24	5.20	5.18	5.16	5.16	5.19	5.25	5.28	5.28	5.26	5.22%	5.27%	
CenterPoint Energy Houston	5.6	15189XAH1	Gen Mtge'L2'	7/1/2023	A-	5.34	5.36	5.40	5.38	5.22	5.14	5.14	4.93	4.85	4.70	4.70	4.58	5.06%	4.66%	
Cincinnati Gas & Electric Co.	6.9	172070BT0	Deb	6/1/2025	A-	5.80	5.82	5.87	5.85	5.64	5.54	5.54	5.33	5.19	5.57	5.57	5.42	5.60%	5.52%	
Cincinnati Gas & Electric Co.	5.7	172070CN2	Deb	9/15/2012	A-	5.30	5.32	5.35	5.35	5.36	5.37	5.37	5.43	5.45	5.47	5.47	5.51	5.40%	5.48%	
Commonwealth Edison	7.625	202795FJ4	1st Ser 92	4/15/2013	A-	6.73	6.78	6.83	6.84	6.84	6.88	6.88	6.94	6.98	7.02	7.02	7.06	6.90%	7.03%	
Commonwealth Edison	7.5	202795FM7	1st Ser 94	7/1/2013	A-	6.57	6.61	6.66	6.67	6.67	6.71	6.71	6.76	6.80	6.84	6.84	6.88	6.73%	6.86%	
Commonwealth Edison	6.15	202795HE3	1st Ser 98	3/15/2012	A-	5.80	5.83	5.85	5.86	5.89	5.92	5.92	5.97	6.00	6.03	6.03	6.08	5.93%	6.05%	
Commonwealth Edison	5.875	202795HG8	1st Ser 100	2/1/2033	A-	5.76	5.71	5.79	5.70	5.52	5.51	5.51	5.18	4.91	5.20	4.85	5.40%	5.08%		
Commonwealth Edison	4.7	202795HH6	1st Ser 101	4/15/2015	A-	4.34	4.36	4.37	4.37	4.30	4.26	4.26	4.21	4.25	4.28	4.28	4.29	4.30%	4.28%	
Commonwealth Edison	5.9	202795HK9	1st Ser 103	3/15/2036	A-	5.76	5.71	5.79	5.68	5.47	5.47	5.47	5.17	4.89	4.88	4.88	4.81	5.33%	4.86%	
Commonwealth Edison	5.95	202795HN3	1st Ser 104	8/15/2016	A-	5.21	5.25	5.29	5.29	5.18	5.12	5.12	5.08	5.11	5.09	5.09	5.10	5.16%	5.09%	
Connecticut Lt & Pwr	7.875	20597DZ6	1st & Ref D	10/1/2024	A-	6.35	6.37	6.40	6.38	6.06	5.96	5.96	5.65	5.51	5.74	5.74	5.60	5.98%	5.69%	
Connecticut Lt & Pwr	5	20597DT9	1st & Ref '05A	4/1/2015	A-	4.54	4.58	4.59	4.59	4.53	4.49	4.49	4.45	4.46	4.49	4.49	4.48	4.52%	4.49%	
Connecticut Lt & Pwr	5.62	20597DU6	1st & Ref '05B	4/1/2035	A-	5.69	5.64	5.58	5.55	5.37	5.32	5.32	5.09	4.91	4.58	5.00	4.78	5.23%	4.93%	
Connecticut Lt & Pwr	6.35	20597DV4	1st & Ref'06A	6/1/2036	A-	5.78	5.73	5.70	5.68	5.49	5.44	5.44	5.09	4.74	5.08	5.08	4.86	5.34%	5.01%	
Connecticut Lt & Pwr	5.38	20597DW2	1st & Ref'07A	3/1/2017	A-	4.85	4.90	4.91	4.91	4.79	4.73	4.73	4.65	4.66	4.70	4.70	4.77%	4.70%		
Connecticut Lt & Pwr	5.75	20597DX0	1st & Ref'07B	3/1/2037	A-	5.76	5.71	5.64	5.62	5.42	5.38	5.38	4.95	4.60	5.00	5.00	4.78	5.27%	4.93%	
Consolidated Edison, Inc.	5.62	209111D23	Deb '02A	7/1/2012	A-	5.28	5.30	5.33	5.33	5.24	5.35	5.35	5.39	5.42	5.45	5.45	5.49	5.37%	5.46%	
Consolidated Edison, Inc.	4.88	209111EA7	Deb '02B	2/1/2013	A-	4.55	4.57	4.59	4.59	4.58	4.58	4.58	4.58	4.63	4.65	4.65	4.68	4.61%	4.66%	
Consolidated Edison, Inc.	5.88	209111EB5	Deb '03A	4/1/2033	A-	5.62	5.53	5.58	5.56	5.58	5.34	5.34	5.34	5.11	4.81	5.00	5.00	4.86	5.26%	4.95%
Consolidated Edison, Inc.	3.85	209111EC3	Deb '03B	6/15/2013	A-	3.64	3.66	3.67	3.67	3.64	3.64	3.64	3.68	3.67	3.69	3.69	3.70	3.67%	3.69%	
Consolidated Edison, Inc.	4.7	209111EE9	Deb '04A	2/1/2014	A-	4.37	4.40	4.42	4.39	4.35	4.33	4.33	4.36	4.36	4.36	4.36	4.37	4.37%	4.36%	
Consolidated Edison, Inc.	5.7	209111EF6	Deb '04B	2/1/2034	A-	5.57	5.48	5.53	5.51	5.36	5.32	5.32	4.98	4.72	4.00	4.77	4.79	5.11%	4.52%	
Consolidated Edison, Inc.	5.3	209111EH2	Deb '05A	3/1/2035	A-	5.46	5.37	5.42	5.39	5.21	5.16	5.16	4.82	4.59	4.61	4.61	4.53	5.03%	4.58%	
Consolidated Edison, Inc.	5.25	209111EJ8	Deb '05B	7/1/2035	A-	5.48	5.43	5.48	5.45	5.26	5.22	5.22	4.91	4.60	4.66	4.66	4.74	5.09%	4.69%	
Consolidated Edison, Inc.	5.38	209111EK5	Deb '05C	12/15/2015	A-	4.77	4.81	4.82	4.82	4.72	4.68	4.68	4.67	4.69	4.69	4.69	4.69	4.73%	4.69%	
Consolidated Edison, Inc.	5.85	209111EL3	Deb '06A	3/15/2036	A-	5.60	5.51	5.56	5.53	5.34	5.30	5.30	4.95	4.71	4.70	4.70	4.65	5.15%	4.68%	
Consolidated Edison, Inc.	6.2	209111EM1	Deb '06B	6/15/2036	A-	5.64	5.58	5.63	5.61	5.42	5.37	5.37	5.03	4.78	4.75	4.84	4.76	5.23%	4.78%	
Consolidated Edison, Inc.	5.5	209111EN9	Deb '06C	9/15/2016	A-	4.86	4.91	4.88	4.88	4.79	4.73	4.73	4.67	4.69	4.68	4.68	4.67	4.77%	4.68%	
Consolidated Edison, Inc.	5.3	209111EP4	Deb '06D	12/1/2016	A-	4.68	4.76	4.77	4.74	4.64	4.57	4.57	4.52	4.55	4.51	4.51	4.54	4.61%	4.52%	
Consolidated Edison, Inc.	5.7	209111EQ2	Deb '06E	12/1/2036	A-	5.56	5.47	5.52	5.50	5.30	5.33	5.33	4.91	4.73	4.00	4.75	4.60	5.08%	4.45%	
Consolidated Edison, Inc.	6.3	209111ES8	Deb '07A	8/15/2037	A-	5.68	5.59	5.												

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
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CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Duke Energy Corp.	5.625	264399EF9	Sr Nts	11/30/2012	A-	5.20	5.22	5.24	5.25	5.26	5.28	5.29	5.31	5.36	5.36	5.39	5.29%	5.37%		
Energy East Corp.	6.75	29266MAD1	Nts	6/15/2012	A-	6.34	6.36	6.39	6.37	6.39	6.41	6.45	6.48	6.52	6.55	6.55	6.60	6.45%	6.57%	
Energy East Corp.	6.75	29266MAE9	Nts	9/15/2033	A-	6.65	6.40	6.45	6.39	6.12	6.46	6.37	6.17	6.22	6.10	6.10	6.34	6.31%	6.18%	
Entergy Arkansas	6.38	29364DAK6	1st	11/1/2034	A-	6.42	6.41	6.44	6.42	6.36	6.37	6.38	6.38	6.38	6.37	6.37	6.39%	6.37%		
Entergy Arkansas	5.66	29364DAL4	1st	2/1/2025	A-	5.77	5.53	5.55	5.53	5.40	5.66	5.47	5.43	5.34	5.47	5.30	5.26	5.48%	5.34%	
Entergy Mississippi	5.15	29364NAH1	1st	2/1/2013	A-	4.87	4.89	4.92	4.92	4.88	4.87	4.88	4.89	4.92	4.93	4.94	4.95	4.91%	4.94%	
Entergy Mississippi	4.95	29364NAK4	1st	6/1/2018	A-	4.93	4.94	4.94	4.94	4.94	4.95	4.95	4.95	4.95	4.94	5.92	4.94	5.02%	5.27%	
Entergy Mississippi	6.25	29364NAL2	1st	4/1/2034	A-	6.37	6.27	6.28	6.26	6.09	6.10	6.07	6.09	6.03	6.03	6.04	6.14%	6.04%		
Georgia Power Co.	5.65	373334GB1	Sr InsurQtrlyNts'06A	12/15/2040	A-	5.84	5.68	5.72	5.65	5.71	5.85	5.65	4.77	5.64	5.64	5.64	5.65	5.62%	5.64%	
Idaho Pwr	4.75	45138LAK9	Sec M-T Nts'D'	11/15/2012	A-	4.46	4.46	4.48	4.48	4.49	4.52	4.53	4.54	4.57	4.59	4.59	4.61	4.53%	4.60%	
Idaho Pwr	6	45138LAL7	Sec M-T Nts'D'	11/15/2032	A-	5.77	5.71	5.72	5.68	5.49	5.60	5.43	5.16	4.99	5.24	5.24	4.93	5.41%	5.14%	
Idaho Pwr	4.25	45138LAM5	Sec M-T Nts'E'	10/1/2013	A-	3.96	3.98	4.00	3.99	3.98	3.99	3.99	4.03	4.05	4.05	4.02	4.00%	4.04%		
Idaho Pwr	5.5	45138LAN3	Sec M-T Nts'E'	4/1/2033	A-	5.62	5.56	5.57	5.52	5.33	5.45	5.27	4.98	4.81	5.05	5.05	4.75	5.25%	4.95%	
Idaho Pwr	5.5	45138LAP8	Sec M-T Nts'E'	3/15/2034	A-	5.63	5.56	5.57	5.53	5.33	5.44	5.38	4.97	4.79	5.04	5.04	4.73	5.25%	4.94%	
Idaho Pwr	5.875	45138LAQ6	Sec M-T Nts'E'	8/15/2034	A-	5.73	5.67	5.68	5.63	5.44	5.55	5.38	5.07	4.89	5.15	5.15	4.84	5.35%	5.05%	
Idaho Pwr	5.3	45138LAR4	Sec M-T Nts'F'	8/15/2035	A-	5.57	5.51	5.62	5.48	5.28	5.40	5.22	4.91	4.73	4.98	4.98	4.67	5.19%	4.88%	
KeySpan Corp.	8	49337WAC4	Nts	11/15/2030	A-	6.62	6.57	6.59	6.50	6.31	6.43	6.26	5.93	5.66	5.78	5.78	5.97	6.20%	5.84%	
KeySpan Corp.	4.65	49337WAG5	Nts	4/1/2013	A-	4.43	4.45	4.42	4.42	4.41	4.42	4.42	4.42	4.45	4.46	4.46	4.49	4.44%	4.47%	
KeySpan Corp.	5.88	49337WAH3	Nts	4/1/2033	A-	5.98	5.92	5.94	5.88	5.68	5.80	5.62	5.29	5.01	5.13	4.92	5.53%	5.06%		
MidAmerican Energy Co.	5.65	595620AF2	Sr Nts	7/15/2012	A-	5.29	5.32	5.35	5.35	5.37	5.38	5.39	5.43	5.45	5.46	5.48	5.48	5.40%	5.47%	
MidAmerican Energy Co.	5.95	595620AGO	Sr Nts	7/15/2017	A-	5.20	5.20	5.23	5.22						5.04	5.01	5.13%	5.02%		
MidAmerican Energy Co.	5.8	59562EAH8	MTN-branche # Tr 00005	10/15/2036	A-	5.62	5.57	5.58	5.59	5.39	5.51	5.31	5.05	4.89	4.81	4.81	4.87	5.25%	4.83%	
Oncor Electric Delivery	6.38	68233DAL1	Sr Sec Nts	1/15/2015	A-	5.60	5.63	5.67	5.64	5.57	5.60	5.52	5.53	5.58	5.59	5.57	5.59%	5.58%		
Oncor Electric Delivery	7.25	68233DAP2	Sr Sec Nts	1/15/2033	A-	6.14	6.09	6.22	6.08	5.91	6.04	5.82	5.48	5.31	5.33	5.33	5.39	5.76%	5.35%	
Oncor Electric Delivery	7	68233DAR8	Deb	9/1/2022	A-	5.90	5.88	6.08	5.98	5.79	5.99	5.69	5.48	5.55	5.49	5.46	5.73%	5.48%		
Oncor Electric Delivery	6.38	68233DAS6	Sr Sec Nts	5/1/2012	A-	6.00	6.03	6.06	6.06	6.09	6.11	6.13	6.16	6.19	6.22	6.22	6.27	6.13%	6.24%	
Oncor Electric Delivery	7	68233DAT4	Sr Sec Nts	5/1/2032	A-	6.10	6.04	6.18	6.04	5.87	5.99	5.75	5.59	5.25	5.31	5.31	5.30	5.73%	5.31%	
PSI Energy, Inc.	5	693627AZ9	Deb	9/15/2013	A-	4.59	4.62	4.64	4.62	4.62	4.64	4.64	4.65	4.67	4.69	4.69	4.72	4.65%	4.70%	
PSI Energy	6.12	693627AY7	Deb	10/15/2035	A-	5.89	5.83	5.88	5.86	5.66	5.78	5.56	5.21	5.05	5.04	5.04	5.06	5.49%	5.05%	
PSI Energy	6.05	693627AZ4	Deb	6/15/2016	A-	5.31	5.36	5.37	5.36	5.27	5.30	5.23	5.21	5.30	5.26	5.25	5.29%	5.26%		
Penna P&L	7.375	709051CD6	1st	3/1/2014	A-	6.62	6.67	6.70	6.70	6.66	6.69	6.41						6.57	6.60%	6.57%
Public Serv, New Hamp.	5.25	744482BG4	1st L'	7/15/2014	A-	4.84	4.87	4.89	4.89	4.79	4.80	4.78	4.77	4.80	4.81	4.81	4.82	4.82%	4.81%	
Public Service Electric and Gas Co.	8	744567BA5	1st & Ref	6/1/2037	A-	6.43	6.37	6.47	6.44	6.23	6.24	6.05	5.68	5.70	5.80	5.57	6.07%	5.72%		
Public Service Electric and Gas Co.	5	744567BB3	1st & Ref	7/1/2037	A-	5.78	5.72	5.28	5.73	5.56	5.61	5.42	5.05	4.93	5.02	4.79	5.33%	4.94%		
Public Service Electric and Gas Co.	9.25	744567CN6	1st & Ref CC	6/1/2021	A-	6.72	6.75	6.66	6.77	6.66	6.70	6.55	6.32	6.25	6.33	6.22	6.52%	6.29%		
Public Service Electric and Gas Co.	6.75	744567EP9	1st & Ref VV	1/1/2016	A-	5.81	5.79	5.75	5.79	5.75	5.77	5.70	5.65	5.67	5.68	5.68	5.73%	5.68%		
Public Service Electric and Gas Co.	5.12	74456QAJ5	Sec M-T Nts'B'	9/1/2012	A-	4.81	4.83	4.84	4.85	4.86	4.88	4.89	4.92	4.95	4.95	4.95	4.98	4.89%	4.96%	
Public Service Electric and Gas Co.	5	74456QAK2	Sec M-T Nts'B'	1/1/2013	A-	4.68	4.70	4.72	4.72	4.73	4.73	4.73	4.75	4.78	4.78	4.78	4.79	4.79%	4.79%	
Public Service Electric and Gas Co.	5.38	74456QAL0	Sec M-T Nts'C'	9/1/2013	A-	4.84	4.87	4.90	4.91	4.91	4.92	4.93	4.96	4.99	4.99	5.00	4.93%	4.99%		
Public Service Electric and Gas Co.	5	74456QAN6	Sec M-T Nts'D'	8/15/2014	A-	4.54	4.58	4.62	4.62	4.52	4.53	4.51	4.52	4.55	4.55	4.55	4.56	4.55%	4.55%	
Puget Sound Pwr & Lt	7.02	74531EA00	Sr M-T Nts'A'	12/1/2027	A-	6.26	6.22	6.20	6.18	5.89	6.00	5.84	5.58	5.34	5.36	5.30	5.79%	5.34%		
Puget Sound Energy	6.74	74531EA8B	Sr M-T Nts'A'	6/15/2018	A-	5.89	5.91	5.87	5.84	5.70	5.73	5.62	5.50	5.53	5.52	5.46	5.67%	5.50%		
Puget Sound Energy	7	74531EAC6	Sr M-T Nts'B'	3/9/2029	A-	6.43	6.38	6.06	6.26	6.06	6.17	6.01	5.76	5.50	5.53	5.34	5.92%	5.47%		
Puget Sound Energy	5.48	74532BU9	Sr Nts	6/1/2035	A-	5.73	5.64	5.61	5.59	5.36	5.45	5.27	4.98	4.77	4.72	4.72	4.64	5.21%	4.69%	
Puget Sound Energy	5.2	745332BV7	Sr(Se)Nts	10/1/2015	A-	4.76	4.80	4.73	4.66	4.68	4.62	4.58	4.67	4.63	4.63	4.64	4.68%	4.63%		
Puget Sound Energy	6.72	745332BW5	Sr Nts	6/15/2036	A-	6.09	5.91	5.89	5.87	5.66	5.73	5.54	5.25	5.02	4.98	4.98	4.93	5.49%	4.96%	
Puget Sound Energy	6.27	745332BX3	Sr(Se)Nts	3/15/2037	A-	5.99	5.82	5.79	5.77	5.56	5.63	5.44	5.11	4.88	4.87	4.87	4.82	5.38%	4.85%	
Southern Co. (The)	5.3	842587AB0	Sr Nts'07A'	1/15/2012	A-	5.07	5.09	5.11	5.12	5.15	5.17	5.19	5.21	5.24	5.25	5.27	5.29	5.18%	5.27%	
Southwestern Public Serv	5.6	845743BK8	Sr Nts'E'	10/1/2016	A-	5.10	5.13	5.15	5.10	5.01	5.03	4.95	4.88	4.90	4.90	4.90	4.88	4.99%	4.89%	
Southwestern Public Serv	6	845743BK8	Sr Nts'F'	10/1/2036	A-	5.98	5.84	5.89	5.83	5.59	5.67	5.52	5.31	5.04	5.14	5.14	5.16	5.51%	5.15%	
Virginia Electric & Power Co.	4.75	927804EU4	Sr Nts'A'	3/1/2013	A-	4.42	4.44	4.46	4.46	4.47	4.48	4.49	4.49	4.52	4.52	4.52	4.52	4.48%	4.53%	
Virginia Electric & Power Co.	5.25	927804EW0	Sr Nts'C'	12/15/2015	A-	4.68	4.72	4.74	4.74	4.67	4.68	4.62	4.58	4.61	4.58	4.58	4.57	4.65%	4.58%	
Virginia Electric & Power Co.	5.4	927804EZ3	Sr Nt 2006 Ser A	1/15/2016	A-	4.78	4.82	4.85	4.85	4.76	4.75	4.69	4.66	4.70	4.67	4.67	4.68	4.74%	4.67%	
Virginia Electric & Power Co.	6	927804FAT7	Sr Nt 2006 Ser B	1/15/2036	A-	5.56	5.56	5.58	5.57	5.43	5.43	5.20	5.14	4.78	4.77	4.77	4.73	5.20%	4.76%	
Virginia Electric & Power Co.	6	927804FB5	Sr Nt 2007 Ser A	5/15/2037	A-	5.57	5.55	5.58	5.54	5.36	5.41	5.18	5.12	4.72	4.74	4.74	4.70	5.18%	4.73%	
Virginia Electric & Power Co.	5.95	927804FC3	Sr Nt 2007 Ser B	9/15/2017	A-	5.12	5.18	5.16	5.21	5.09	5.10	5.02	4.93	4.97	4.95	4.95	4.94	4.95%	4.95%	
Virginia Electric & Power Co.	5.1	927804FD1	Sr Nt 2007 Ser C	11/30/2012	A-	4.75	4.77	4.79	4.79	4.60	4.82	4.82	4.84	4.87	4.88	4.88	4.90	4.83%	4.89%	
Virginia																				

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
CenterPoint Energy Res	7.875	15189YAB2	Sr Nts	4/1/2013	BBB+	6.89	6.95	7.03	7.04	7.04	7.06	7.06	7.14	7.21	7.24	7.24	7.30	7.10%	7.26%
CenterPoint Energy Res	6.25	15189YAD8	Sr Nts	2/1/2037	BBB+	6.07	6.01	6.02	6.12	5.87	5.83	5.83	5.42	5.37	5.44	5.44	5.21	5.72%	5.36%
Consumers Energy Co.	6.875	210518AT3	Sr Nts 'B'	3/1/2018	BBB+	5.89	5.92	6.21	6.01	5.90	5.85	5.85	5.72	5.64	5.72	5.72	5.82	5.85%	5.75%
Consumers Energy Co.	5	210518CD6	1st 'O'	2/15/2012	BBB+	4.79	4.80	4.82	4.83	4.85	4.87	4.87	4.91	4.92	4.94	4.94	4.97	4.88%	4.95%
Consumers Energy Co.	5.5	210518CE4	1st 'P'	8/15/2016	BBB+	4.87	4.92	4.92	4.93	4.83	4.80	4.80	4.77	4.79	4.82	4.82	4.78	4.84%	4.81%
Consumers Energy Co.	5.15	210518CG9	1st	2/15/2017	BBB+	4.76	4.81	4.71	4.71	4.61	4.55	4.55	4.52	4.53	4.56	4.56	4.53	4.62%	4.55%
Consumers Energy Co.	5.65	210518CL8	1st	4/15/2020	BBB+	5.08	5.07	5.09	5.08	4.96	4.90	4.90	4.75	4.70	4.81	4.81	4.75	4.91%	4.79%
Consumers Energy Co.	5.8	210518CP9	1st	9/15/2035	BBB+	5.81	5.76	5.77	5.60	5.37	5.33	5.33	4.91	4.64	4.87	4.87	4.92	5.27%	4.89%
Consumers Energy Co.	5.65	210518CQ7	1st	9/15/2018	BBB+	5.04	5.06	5.09	5.08	5.00	4.95	4.95	4.82	4.75	4.81	4.81	4.78	4.93%	4.80%
Consumers Energy Co.	6.12	210518CR5	1st	3/15/2019	BBB+	5.33	5.35	5.38	5.37	5.26	5.19	5.19	5.06	4.99	5.06	5.06	5.04	5.19%	5.05%
Duquesne Light Holdings, Inc.	5.5	266233AA3	Sr Nts	8/15/2015	BBB+	5.35	5.35	5.36	5.34	5.27	5.28	5.28	5.21	5.34	5.33	5.33	5.27	5.31%	5.31%
Duquesne Light Holdings, Inc.	6.25	266233AB1	Sr Nts	8/15/2035	BBB+	7.66	7.59	7.61	7.32	7.10	7.23	7.02	7.11	6.88	6.99	6.99	6.73	7.19%	6.90%
Empire District Electric Co. (The)	7.2	291641AS7	1st	12/1/2016	BBB+	6.21	6.27	6.29	6.29	6.18	6.20	6.11	6.03	5.99	5.99	5.95	5.95	6.12%	5.96%
Energy Gulf States	6.18	29364LAT9	1st	3/1/2035	BBB+	6.58	6.23	6.33	6.30	6.21	6.21	6.18	6.19	6.18	6.18	6.18	6.25%	6.18%	
Energy Gulf States	5.7	29364LAU6	1st	6/1/2015	BBB+	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70%	5.70%
Florida Pwr	6.75	34110QAL2	Nts	2/1/2028	BBB+	6.36	6.32	6.36	6.34	6.17	6.27	6.12	5.94	5.63	5.71	5.58	6.04%	5.67%	
Interstate Pwr & Lt	6.45	461070AC8	Sr Deb	10/15/2033	BBB+	5.91	5.85	5.86	5.84	5.65	5.77	5.59	5.32	5.04	5.13	4.93	5.50%	5.06%	
Interstate Pwr & Lt	6.3	461070AD6	Sr Deb	5/1/2034	BBB+	5.86	5.81	5.82	5.80	5.61	5.72	5.55	5.27	4.99	5.08	5.08	4.87	5.46%	5.01%
Interstate Pwr & Lt	5.5	461070AE4	Sr Deb	7/15/2025	BBB+	5.62	5.58	5.59	5.57	5.39	5.45	5.27	5.05	5.01	5.06	5.06	4.91	5.30%	5.01%
MDU Resources Group, Inc.	5.98	552690AF6	Sr (Sec)Nts	12/15/2033	BBB+	7.34	7.27	7.28	7.26	7.03	7.16	7.27	6.57	6.17	6.41	6.09	6.07	6.83%	6.19%
MidAmerican Funding	6.93	59562HAJ7	Sr Sec Bonds	3/1/2029	BBB+	6.13	5.98	6.16	6.08	5.90	6.00	5.85	5.68	5.47	5.63	5.63	5.56	5.84%	5.61%
MidAmerican Energy Hldg	5.88	59562VAF4	Sr Nts	10/1/2012	BBB+	5.45	5.47	5.49	5.51	5.52	5.54	5.55	5.58	5.60	5.62	5.62	5.67	5.55%	5.64%
MidAmerican Energy Hldg	5	59562VAK3	Sr Nts	2/15/2014	BBB+	4.63	4.65	4.67	4.63	47.60	4.61	4.60	4.62	4.64	4.64	4.64	4.65	8.22%	4.64%
National Grid plc	6.3	636274AC6	Notes	8/1/2016	BBB+	5.48	5.52	5.54	5.53	5.46	5.48	5.39	5.40	5.48	5.49	5.47	5.49	5.48%	5.48%
Oklahoma Gas & Elec Co	6.65	678858AZ4	Sr Nts	7/15/2027	BBB+	6.05	6.01	6.02	6.00	5.75	5.85	5.68	5.45	5.22	5.24	5.24	5.07	5.63%	5.18%
Oklahoma Gas & Elec Co	6.5	678858BB6	Sr Nt	7/15/2017	BBB+	5.68	5.74	5.76	5.75	5.64	5.66	5.56	5.42	5.47	5.45	5.45	5.42	5.58%	5.44%
Oklahoma Gas & Elec Co	6.5	678858BC4	Sr Nt	4/15/2028	BBB+	6.02	5.98	5.99	5.97	5.74	5.84	5.66	5.46	5.22	5.24	5.35	5.64%	5.28%	
Oklahoma Gas & Elec Co	5.75	678858BF7	Sr Nts	1/15/2036	BBB+	5.76	5.71	5.72	5.70	5.42	5.66	5.32	5.11	4.83	4.85	4.85	4.63	5.30%	4.78%
Oklahoma Gas & Elec Co	5.15	678858BG5	Sr Nts	1/15/2016	BBB+	4.83	4.87	4.88	4.88	4.80	4.81	4.75	4.72	4.71	4.71	4.69	4.78%	4.70%	
Public Svc No Car	6.99	744516AA3	Sr Deb	1/15/2026	BBB+	6.38	6.28	6.29	6.28	6.06	6.12	5.84	5.55	5.46	5.54	5.54	5.38	5.89%	5.49%
Public Svc No Car	7.45	744516AB1	Sr Deb	12/15/2026	BBB+	6.51	6.40	6.41	6.40	6.23	6.30	6.00	5.70	5.59	5.68	5.68	5.52	6.04%	5.63%
Sempra Energy	6	816851AF6	Nts	2/1/2013	BBB+	5.54	5.57	5.60	5.61	5.58	5.60	5.61	5.63	5.66	5.67	5.68	5.72	5.62%	5.69%
Southern California Edison Co.	6.65	842400EB5	Nts	4/1/2029	BBB+	5.92	5.84	5.89	5.87	5.70	5.81	5.61	5.38	5.12	5.20	5.20	5.04	5.55%	5.15%
Tampa Electric Co.	6.875	875127AS1	Nts	6/15/2012	BBB+	6.37	6.40	6.43	6.45	6.47	6.50	6.52	6.59	6.62	6.65	6.65	6.53%	6.67%	
Tampa Electric Co.	6.375	875127AU6	Nts	8/15/2012	BBB+	5.89	5.92	5.95	5.97	5.98	6.01	6.02	6.08	6.11	6.13	6.13	6.18	6.03%	6.15%
Tampa Electric Co.	6.55	875127AV4	Nts	5/15/2036	BBB+	5.90	5.84	5.82	5.80	5.43	5.64	5.53	5.32	5.06	5.19	5.19	4.94	5.47%	5.11%
Tampa Electric Co.	6.15	875127AW2	Sr Nts	5/15/2037	BBB+	5.81	5.68	5.65	5.63	5.52	5.55	5.36	5.22	4.00	4.98	4.98	4.83	5.27%	4.93%
Tampa Electric Co.	6.1	875127AX0	Fixed Rt	5/15/2018	BBB+	5.40	5.40	5.40	5.37	5.27	5.31	5.21	5.13	4.96	5.14	5.14	5.07	5.23%	5.12%
Union Electric	5.25	906548BX9	Sr Sec Nts	9/1/2032	BBB+	4.96	4.98	5.00	5.01	5.02	5.03	5.04	5.05	5.08	5.10	5.12	5.04%	5.10%	
Union Electric	5.5	906548BY7	Sr Sec Nts	3/15/2034	BBB+	6.10	5.93	5.98	5.96	5.58	5.69	5.51	5.17	4.86	5.07	4.76	4.73	5.45%	4.85%
Union Electric	4.75	906548BZ4	Sr Sec Nts	4/1/2015	BBB+	4.42	4.45	4.46	4.46	4.41	4.42	4.35	4.38	4.41	4.42	4.40	4.40	4.42%	4.41%
Union Electric	4.65	906548CB4	Sr Sec Nts	10/1/2013	BBB+	4.34	4.32	4.34	4.34	4.34	4.34	4.35	4.37	4.38	4.39	4.40	4.36%	4.39%	
Union Electric	5.5	906548CC4	Sr Sec Nts	5/15/2014	BBB+	5.06	5.10	5.12	5.12	5.08	5.09	5.05	5.04	5.08	5.09	5.10	5.10	5.05%	5.10%
Union Electric	5	906548CD2	Sr Sec Nts	2/1/2020	BBB+	4.95	4.91	4.94	4.93	4.73	4.77	4.65	4.46	4.46	4.45	4.45	4.42	4.69%	4.47%
Union Electric	6.4	906548CE0	Sr Sec Nts	6/15/2017	BBB+	5.61	5.64	5.63	5.61	5.49	5.52	5.43	5.35	5.39	5.42	5.35	5.35	5.48%	5.37%
Union Electric	6	906548CF7	Sr Sec Nts	4/1/2018	BBB+	5.47	5.42	5.45	5.45	5.35	5.39	5.27	5.11	5.07	5.15	5.06	5.08	5.27%	5.10%
Union Electric	6.7	906548CG5	Sr Sec Nts	2/1/2019	BBB+	5.78	5.76	5.80	5.79	5.66	5.71	5.57	5.47	5.45	5.47	5.43	5.51	5.62%	5.47%
Westar Energy, Inc.	6	957079AA8	1st Mtg Bd	7/1/2014	BBB+	5.38	5.42	5.46	5.45	5.41	5.43	5.41	5.40	5.43	5.45	5.46	5.47	5.43%	5.46%
Westar Energy, Inc.	5.15	957079TAB6	1st Mtg Bd	1/1/2017	BBB+	4.87	4.92	4.94	4.93	4.82	4.85	4.76	4.69	4.71	4.73	4.70	4.69	4.89%	4.71%
Westar Energy, Inc.	5.95	957079TAC4	1st Mtg Bd	1/1/2035	BBB+	6.12	6.06	6.11	6.09	5.88	6.00	5.81	5.46	5.48	5.71	5.41	5.38	5.79%	5.50%
Xcel Energy Inc.	5.88	957079TAE0	1st Mtg Bd	7/15/2036	BBB+	6.10	6.05	6.10	6.07	5.86	5.99	5.79	5.43	5.05	5.28	4.98	4.96	5.64%	5.07%
AEP Texas North	5.5	0010EQAB2	Sr Nts	3/1/2013	BBB	5.11	5.13	5.16	5.16	5.16	5.15	5.15	5.18	5.21	5.23	5.25	5.26	5.18%	5.25%
American Electric Power Co., Inc.	5.25	025537AE1	Sr Nts	6/1/2015	BBB	4.78	4.81	4.83	4.82	4.76	4.72	4.72	4.67	4.71	4.80	4.79	4.79	4.77%	4.79%
Appalachian Power Co.	5.95	037735BZ9	Sr Nts'H'	5/15/2033	BBB	6.11	5.91	5.96	5.90	5.71	5.67	5.67	5.46	5.16	5.31	5.37	5.63%	5.33%	
Appalachian Power	4.95	037735CB1	Sr Nts'I'	2/1/2015	BBB	4.60	4.63	4.65	4.64	4.58	4.55	4.55	4.52	4.53	4.54	4.54	4.53	4.57%	4.54%
Appalachian Power	5	037735CD7	Sr Nts'K'	6/1/2017	BBB	4.72	4.77	4.74	4.73	4.62	4.56	4.56	4.52	4.57	4.56	4.56	4.53	4.62%	4.55%
Appalachian Power	5.8	037735CE5	Sr Nts'L'	10/1/2035	BBB	5.89	5.76	5.81	5.86	5.66	5.62	5.62							

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Progress Energy, Inc.	6.5	144141C55	Nts	7/15/2012	BBB	6.03	6.06	6.09	6.10	6.12	6.12	6.18	6.21	6.25	6.27	6.31	6.15%	6.28%	
CenterPoint Energy, Inc.	6.85	15189TAG2	Sr Nts'B'	6/1/2015	BBB	5.99	6.05	6.08	5.99	5.90	5.86	5.86	5.84	5.93	6.02	6.00	6.03	5.96%	6.02%
CenterPoint Energy, Inc.	5.95	15189TAN7	Sr Nts	2/1/2017	BBB	5.45	5.50	5.46	5.45	5.34	5.23	5.23	5.20	5.25	5.30	5.26	5.33%	5.27%	
Cleco Power LLC	5.375	185508AC2	Nts	5/1/2013	BBB	5.05	5.07	5.08	5.09	5.07	5.07	5.07	5.08	5.11		5.15	5.08%	5.15%	
Cleco Power LLC	4.95	185508AD0	Nts	7/15/2015	BBB	4.70	4.73	4.74	4.74	4.63	4.59	4.59	4.53	4.56	4.59	4.59	4.57	4.63%	4.58%
Cleco Power LLC	6.5	185508AE8	Nts	12/1/2035	BBB	6.44	6.38	6.39	6.37	6.01	6.04	6.04	5.60	5.30	5.47	5.47	5.21	5.89%	5.38%
Cleveland Electric Illuminating Co.	7.88	186108BU9	Sec Nts'D'	11/1/2017	BBB	6.49	6.56	6.60	6.56	6.43	6.31	6.31	6.16	6.23	6.29	6.29	6.27	6.38%	6.28%
Commonwealth Edison	6.95	202795GX2	Nts	7/15/2018	BBB	6.19	6.28	6.28	6.27	6.04	5.98	5.98	5.85	5.84	5.91	5.91	5.79	6.03%	5.87%
DTE Energy Co.	6.35	233331AM9	Sr Nts'06B	6/1/2016	BBB	5.64	5.70	5.64	5.60	5.46	5.48	5.41	5.44	5.51	5.51	5.48	5.48	5.53%	5.49%
El Paso Electric Co.	6	283677AW2	Sr Nts	5/15/2035	BBB	6.25	6.00	5.93	5.91	5.71	5.83	5.64	5.29	5.20	5.43	5.10	5.08	5.61%	5.20%
Indiana Mich Pwr	6.375	454889AH9	Sr Nts'E'	11/1/2012	BBB	5.92	5.95	5.98	5.94	5.95	5.98	5.99	6.01	6.05	6.07	6.12	6.00%	6.09%	
Indiana Mich Pwr	5.05	454889AK2	Sr Nts'F'	11/15/2014	BBB	4.70	4.74	4.76	4.67	4.63	5.98	4.62	4.61	4.66	4.62	4.63	4.77%	4.62%	
Indiana Mich Pwr	5.65	454889AL0	Sr Nts'G'	12/1/2015	BBB	5.10	5.15	5.17	5.12	5.04	5.06	5.00	4.95	4.99	5.00	5.00	5.03	5.05%	5.01%
Indiana Mich Pwr	6.05	454889AM8	Sr Nts'H'	3/15/2037	BBB	5.87	5.77	5.82	5.84	5.63	5.76	5.49	5.31	5.08	5.03	4.95	4.57%	5.00%	
Kansas City Power & Light	6.05	485134BH2	Sr Nt Ser A	11/15/2035	BBB	6.14	6.08	6.06	6.03	5.83	5.95	5.69	5.40	5.49	5.34	5.34	5.22	5.71%	5.30%
Kansas City Power & Light	5.85	485134BJ8	Sr Nt	6/15/2017	BBB	5.36	5.41	5.33	5.28	5.18	5.19	5.13	5.07	5.09	5.11	5.11	5.20%	5.11%	
Kentucky Power	5.62	491386AL2	Sr Nts'D'	12/1/2032	BBB	6.01	5.96	6.01	5.98	5.79	5.90	5.72	5.42	5.07	5.19	5.19	5.28	5.63%	5.22%
Nevada Power	6.5	641423BH0	Gen & Ref'l'	4/15/2012	BBB	6.13	6.16	6.15	6.16	6.20	6.23	6.25	6.28	6.33	6.35	6.35	6.40	6.25%	6.37%
Nevada Power	5.88	641423BK3	Gen & Ref'L'	1/15/2015	BBB	5.25	5.29	5.27	5.27	5.22	5.24	5.18	5.19	5.26	5.25	5.23	5.24%	5.24%	
Nevada Power	6.75	641423BU1	Gen & Refunding Mtg Nt	7/1/2037	BBB	6.00	5.93	5.88	5.86	5.64	5.76	5.51	5.23	5.00	5.07	4.94	5.49%	5.03%	
Northeast Utilities	7.25	664397AE6	Sr Nts'A'	4/1/2012	BBB	6.80	6.84	6.87	6.89	6.92	6.96	6.98	7.01	7.05	7.07	7.11	7.14	6.97%	7.11%
Ohio Power Co.	5.5	677415CD1	Sr Nts'F'	2/15/2013	BBB	5.11	5.13	5.15	5.14	5.14	5.16	5.17	5.19	5.24	5.26	5.26	5.18%	5.26%	
Ohio Power Co.	6.6	677415CF6	Sr Nts 'G'	2/15/2033	BBB	6.02	6.00	5.98	5.96	5.77	5.88	5.67	5.58	5.16	5.32	5.14	5.65%	5.26%	
Ohio Power Co.	4.85	677415CG4	Sr Nts 'H'	1/15/2014	BBB	4.53	4.55	4.53	4.54	4.50	4.48	4.47	4.49	4.52	4.51	4.51	4.56	4.52%	4.53%
Ohio Power Co.	6.38	677415CJ8	Sr Nts 'I'	7/15/2033	BBB	6.48	6.20	6.25	6.23	6.14	6.26	6.07	6.09	6.10	6.10	6.11	6.18%	6.10%	
Ohio Power Co.	6	677415CL3	Sr Nts'K'	6/1/2016	BBB	5.33	5.38	5.30	5.32	5.21	5.23	5.16	5.17	5.21	5.14	5.14	5.19	5.23%	5.16%
PPL Energy Supply	5.7	69352JAG2	Reset PutSecs	10/15/2035	BBB	5.20	5.25	5.27	5.30	5.22	5.29	5.22	5.17	5.26	5.27	5.27	5.25	5.25%	5.26%
PPL Energy Supply	6.2	69352JAHO	Sr Nts	5/15/2016	BBB	5.56	5.62	5.64	5.60	5.51	5.53	5.45	5.39	5.62	5.58	5.55	5.55%	5.57%	
PPL Energy Supply	6	69352JAK3	Sr Nts	12/15/2036	BBB	6.33	6.27	6.29	6.26	6.00	6.09	5.90	5.67	5.47	5.76	5.76	5.96%	5.74%	
PPL Energy Supply	6.5	69352JAL1	Sr Nts	5/1/2018	BBB	5.85	5.86	5.81	5.82	5.70	5.76	5.66	5.50	5.56	5.73	5.73	5.71	5.72%	
PPL Energy Supply	6.3	69352JAM9	Sr Nts	7/15/2013	BBB	5.72	5.73	5.77	5.77	5.76	5.78	5.79	5.85	5.90	5.89	5.90	5.89	5.81%	5.90%
PSEG Power LLC	8.62	69362BAJ1	Sr Nts	4/15/2031	BBB	6.80	6.79	6.88	6.85	6.52	6.71	6.54	6.37	6.22	6.08	6.08	6.47%	6.00%	
PSEG Power LLC	6.95	69362BAW4	Sr Nts	6/1/2012	BBB	6.46	6.48	6.51	6.53	6.56	6.59	6.61	6.67	6.70	6.72	6.72	6.76	6.61%	6.73%
PSEG Power LLC	5.5	69362BAN2	Sr Nts	12/1/2015	BBB	5.01	5.02	5.04	5.04	4.97	4.98	4.92	4.92	4.98	4.96	4.94	4.98%	4.95%	
PSEG Power LLC	5	69362BAP7	Sr Nts	4/1/2014	BBB	4.62	4.65	4.69	4.68	4.65	4.66	4.64	4.64	4.67	4.67	4.66	4.66%	4.67%	
Pacific Gas & Electric Co.	4.8	694308GD3	1st	3/1/2014	BBB	4.41	4.43	4.46	4.44	4.40	4.42	4.39	4.40	4.45	4.45	4.45	4.45%	4.45%	
Pacific Gas & Electric Co.	6.05	694308E1	1st	3/1/2034	BBB	5.73	5.67	5.79	5.76	5.73	5.90	5.40	5.24	5.09	5.09	4.88	5.48%	5.02%	
Pacific Gas & Electric Co.	5.8	694308GJ0	Fixed Rt Sr Nt	3/1/2037	BBB	5.66	5.62	5.73	5.70	5.65	5.84	5.51	5.33	5.17	4.81	4.76	5.38%	4.79%	
Pepco Holdings, Inc.	6.12	713291AP7	Nts	6/1/2017	BBB	5.61	5.67	5.68	5.67	5.56	5.57	5.48	5.45	5.52	5.55	5.50	5.56%	5.52%	
Progress Energy, Inc.	7.75	743263AEG5	Sr Nts	3/1/2031	BBB	6.28	6.20	6.25	6.23	6.04	6.19	5.96	5.86	5.66	5.71	5.44	5.45%	5.53%	
Progress Energy, Inc.	7	743263AG0	Sr Nts	10/30/2031	BBB	6.10	6.01	6.06	6.04	5.86	6.00	5.77	5.67	5.46	5.43	5.28	5.26%	5.32%	
Progress Energy, Inc.	6.86	743263AJ4	Sr Nts	4/15/2012	BBB	6.41	6.44	6.46	6.47	6.51	6.54	6.57	6.61	6.64	6.67	6.69	6.73	6.56%	6.70%
Progress Energy, Inc.	5.62	743263AL9	Sr Nts	1/15/2016	BBB	5.00	5.04	5.06	5.06	4.97	4.99	4.92	4.89	4.92	4.93	4.91	4.92%	4.92%	
Publ Service Co. of Oklahoma	6.15	744533BH2	Sr Nts'F'	8/1/2016	BBB	5.44	5.50	5.53	5.52	5.43	5.45	5.37	5.31	5.37	5.40	5.36	5.42%	5.37%	
Publ Service Co. of Oklahoma	6.62	744533BH4	Sr Nts'G'	11/15/2037	BBB	6.02	5.96	6.01	5.99	5.81	5.94	5.63	5.49	5.14	5.49	5.22	5.19	5.66%	5.30%
Southwest'n Elec Power	5.38	845437BE1	Sr Nts	4/15/2015	BBB	5.01	5.04	5.06	5.00	4.94	4.95	4.51	4.85	4.89	4.90	4.90	4.89%	4.90%	
Southwest'n Elec Power	4.9	845437BG6	Sr Nt Ser D	7/1/2015	BBB	4.63	4.64	4.66	4.61	4.56	4.57	4.89	4.47	4.51	4.52	4.52	4.51	4.59%	4.52%
Southwest'n Elec Power	5.55	845437BH4	Sr Nt Ser E	1/15/2017	BBB	5.18	5.22	5.22	5.21	5.11	5.12	5.04	4.98	5.03	4.99	4.96	5.09%	4.98%	
TECO Energy, Inc.	6.75	872375AP5	Nts	5/1/2015	BBB	5.97	6.03	6.04	6.04	5.99	6.02	5.95	5.93	6.07	6.10	6.09	6.10	6.03%	6.10%
WPS Resources Corp.	5.375	929311BAB2	Sr Nts	12/1/2012	BBB	5.05	5.07	5.09	5.09	5.10	5.12	5.12	5.13	5.15	5.17	5.17	5.19	5.12%	5.18%
AmerenEnergy Generating	7.95	02360XAJ6	Sr Nts 'F'	6/1/2032	BBB	8.13	7.87	8.16	8.01	7.96	8.04	8.04	8.13	8.18	8.46		8.18	8.11%	8.32%
Black Hills Corp.	6.5	092113AE9	Nts	5/15/2013	BBB	5.98	6.01	6.04	6.04	5.99	5.99	5.99	6.08	6.08	6.11	6.12	6.15	6.05%	6.13%
Cleveland Electric Illuminating Co.	5.65	186108CD6	Sr Nts	12/15/2013	BBB	5.16	5.14	5.21	5.19	5.18	5.15	5.15	5.17	5.20	5.25	5.25	5.29	5.20%	5.26%
Cleveland Elec. Illum	5.95	186108CE4	Sr Nts	12/15/2036	BBB	6.40	6.34	6.36	6.33	5.93	5.88	5.88	5.54	5.64	5.56	5.58	5.92%	5.57%	
Cleveland Elec. Illum	5.7	186108CF1	Sr Nts	4/1/2017	BBB	5.31	5.37	5.38	5.33	5.22	5.12	5.12	5.06	5.16	5.16	5.18	5.21%	5.17%	
Constellation Energy Group, Inc.	7.6	210371AF7	Nts	4/1/2032	BBB	6.78	6.60	6.69	6.70	6.30	6.33	6.33	6.12	6.22	6.42	6.12	5.89	6.38%	6.14%
Constellation Energy Group, Inc.	4.55	210371AK6	Nts	6/15/2015	BBB	4.37	4.35	4.37	4.34	4.24	4.20	4.20	4.23	4.32	4.34	4.34	4.30	4.30%	4.33%
Empire District Electric Co. (The)	4.5	291641AY4	Sr Nts	6/15/2013	BBB	4.31	4.32	4.33	4.33	4.3									

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
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STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
CMS Energy Corp.	6.3	125896AX8	Sr Nts	2/1/2012	BB+	5.93	6.08	6.08	6.11	6.13	6.13	6.18	6.18	6.21	6.22	6.22	6.12%	6.22%		
CMS Energy Corp.	6.88	125896AZ3	Sr Nts	12/15/2015	BB+	6.26	6.27	6.25	6.26	6.07	6.07	6.13	6.28	6.35	6.34	6.23	6.23	6.22%	6.31%	
CMS Energy Corp.	1.25	125896BB5	Sr Nt Fltg	1/15/2013	BB+	1.27	1.27	1.26	1.24	1.23	1.24	1.22	1.22	1.38	1.38	1.36	1.36	1.28%	1.37%	
FirstEnergy Corp.	7.38	337932AC1	Nts 'C'	11/15/2031	BB+	6.95	6.76	6.80	6.70	6.34	6.48	6.21	6.34	5.98	6.03	6.01	5.99	6.38%	6.01%	
Sierra Pacific Resources	6.75	826428AN4	Sr Nts	8/15/2017	BB+	6.67	6.58	6.62	6.61	6.57	6.59	6.57	6.53	6.68	6.60	6.60	6.60	6.60%	6.60%	
CMS Energy Corp.	6.55	125896BA7	Sr Nts	7/17/2017	BB	6.07	5.99	5.99	5.94	5.76	5.75	5.75	5.84	5.97	6.02	6.06	6.09	5.94%	6.06%	
AES Corp. (The)	7.750	00130HBC8	Sr Nts	3/1/2014	BB-	7.14	7.12	7.14	7.11	7.09	7.20	7.20	7.45	7.39	7.20	7.31	7.17	7.21%	7.23%	
NRG Energy, Inc.	7.25	629377AT9	SrNts	2/1/2014	BB-	7.10	7.10		7.11	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10%	7.10%	
NRG Energy, Inc.	7.38	629377AX0	SrNts	1/15/2017	BB-	7.09	6.99	7.09	7.04	6.99	7.04	7.03	7.16	7.15	7.07	7.11	7.10	7.07%	7.09%	
TXU Corp.	6.5	873168AN8	Sr Nts'Q'	11/15/2024	CC	14.28	13.90	14.13	12.14	12.26	13.00	14.77	16.67	17.11	15.66	15.66	14.60	14.52%	15.31%	
TXU Corp.	6.55	873168AQ1	Sr Nts'R'	11/15/2034	CC	14.71	14.47	14.55	12.53	12.60	13.37	15.41	17.24	17.70	15.78	15.78	15.41	14.96%	15.66%	
DynegyHldgs	8.75	26816LAG7	Sr Nts	2/15/2012	D	8.75	8.57	8.72	8.70	8.73	8.79	9.70	9.36	11.44	10.64	10.64	13.35	9.78%	11.54%	
DynegyHldgs	8.38	26816LAT9	Sr Nts	5/1/2016	D	10.60	10.43	10.02	9.94	10.12	10.47	11.63	12.69	13.84	12.59	12.59	12.59	11.46%	12.59%	
TXU Corp.	5.55	873168AL2	Sr Nts'P'	11/15/2014	D	8.60	8.37	8.44	8.60	6.57	7.03	7.50	8.54	9.02	8.67	8.67	7.81	8.00%	8.38%	
Allegheny Energy Supply	7.8	017363AD4	Nts	3/15/2011	NR	7.45	7.45											7.45%		
Allegheny Generating	6.88	017364AG5	Deb	9/1/2023	NR	6.91	6.86	6.91	6.90	6.79	6.79	6.80	6.81	6.81	6.81	6.81	6.81	6.83%	6.81%	
Arizona Public Service	6.375	040555CC6	Nts	10/15/2011	NR	6.14	6.17	6.19	6.21	6.24	6.27	6.33	6.37					6.24%		
Progress Energy, Inc.	8.62	144141BP2	1st	9/15/2021	NR	6.49	6.52	6.57	6.56	6.41	6.33	6.33	6.09	5.99	6.12	5.98	5.96	6.28%	6.02%	
Progress Energy, Inc.	5.12	144141CT3	1st	9/15/2013	NR	4.66	4.69	4.71	4.72	4.68	4.69	4.69	4.72	4.74	4.75	4.76	4.78	4.72%	4.76%	
Progress Energy, Inc.	5.7	144141CV8	1st	4/1/2035	NR	5.57	5.51	5.56	5.54	5.35	5.31	5.31	4.93	4.76	4.91	4.69	4.67	5.18%	4.76%	
Progress Energy, Inc.	5.15	144141CW6	1st	4/1/2015	NR	4.66	4.70	4.70	4.67	4.63	4.60	4.60	4.55	4.56	4.59	4.59	4.58	4.62%	4.59%	
Progress Energy, Inc.	5.25	144141CX4	1st	12/15/2015	NR	4.66	4.71	4.72	4.72	4.62	4.58	4.58	4.52	4.53	4.58	4.57	4.58	4.61%	4.58%	
Progress Energy, Inc.	6.3	144141CY2	1st	4/1/2038	NR	5.55	5.54	5.59	5.57	5.36	5.33	5.33	4.90	4.72	4.81	4.59	4.63	5.16%	4.68%	
Central Illinois Pub Serv	6.125	153663BJ7	Sr Nts	12/15/2028	NR	6.04	6.04											6.04%		
Central Illinois Pub Serv	6.625	153663BL2	Sr Nts	6/15/2011	NR	6.42												6.42%		
Central Illinois Pub Serv	6.7	153663BM0	Sr Sec Nts	6/15/2036	NR	6.22	6.22											6.22%		
Commonwealth Edison	4.75	202795AW0	SF Deb	12/1/2011	NR	4.76	4.75	4.75	4.75	4.75	4.75	4.75	4.80	4.79	4.77	4.77	4.77	4.76%	4.77%	
Commonwealth Edison	5.4	202795HP8	1st Ser 109	12/15/2011	NR	5.19	5.20	5.22	5.23	5.26	5.28	5.28	5.32	5.34	5.37	5.37	5.37	5.28%	5.37%	
Constellation Energy Group, Inc.	7	210371AH3	Nts	4/1/2012	NR	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52	6.52%	6.52%	
Consumers Energy Co.	5.65	210518CM6	InsurQtrlyNts	4/15/2035	NR	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65%		
DTE Energy Co.	7.05	233331AE7	Sr Nts	6/1/2011	NR	6.90	6.94	6.97	7.00	7.05								6.97%		
Dominion Resources	7.82	257469AC0	Remkt Nts 'E'	9/15/2014	NR	6.18	6.24	6.29	6.27								6.21	6.24%	6.21%	
Duquesne Light Co.	6.7	266228CR4	1st 'O'	4/15/2012	NR	6.86	6.85			6.40	6.43	6.45	6.48	6.52	6.54	6.54	6.60	6.48%	6.56%	
DynegyHldgs	6.875	26816LAD4	Sr Nts	4/1/2011	NR	6.86	6.85			6.37	6.40	6.43	6.45	6.52	6.54	6.54	6.60	6.48%	6.86%	
Empire District Electric Co. (The)	7.05	291641AX6	Sr Nts	12/15/2022	NR	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05%	7.05%	
Entergy Gulf States	4.88	29364LAQ5	1st	11/1/2011	NR	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88%	4.88%	
Entergy Gulf States	5.6	29364LA51	1st	12/1/2014	NR	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60	5.60%	5.60%	
Energy Mississippi	4.65	29364NAM0	1st Mtg	5/1/2011	NR	4.61	4.62	4.63										4.62%		
Energy Mississippi	5.92	29364NAN8	1st	2/1/2016	NR	5.90	5.93	5.95	5.94	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92%	5.92%	
Energy New Orleans	5.65	29364PAJ2	1st	9/10/2029	NR	6.11	6.06	5.82	5.74								5.64	5.81%	5.64%	
Energy New Orleans	5.6	29364PAK9	1st	9/1/2024	NR	5.58	5.58	5.58	5.58								5.59	5.58%	5.59%	
Exelon Generation	6.95	30161MA89	Sr Nts	6/5/2011	NR	6.33	6.33	6.33	6.33	6.33	6.33	6.33						6.33%		
FirstEnergy Corp.	6.45	337932AB3	Nts 'B'	11/15/2011	NR	6.20	6.23	6.25	6.27	6.30	6.33	6.33	6.35	6.39	6.42	6.44	6.44	6.33%	6.44%	
Florida Power Corp.	6.65	341098Z1	1st	7/15/2011	NR	6.47	6.50	6.53	6.56	6.60	6.64							6.55%		
IES Utilities	6.75	44949RAD4	Sr Deb 'B'	3/15/2011	NR	6.53	6.53											6.53%		
Idaho Pwr	6.6	45138LAJ2	Sec M-T Nts 'C'	3/2/2011	NR	6.56	6.60											6.58%		
Kansas City Power & Light	6.5	485134BC3	Sr Nts	11/15/2011	NR	6.27	6.29	6.32	6.34	6.36	6.37	6.40	6.43	6.46	6.49	6.49	6.38%	6.49%		
MidAmerican Funding	6.75	59562HAK4	Sr Sec Nts	3/1/2011	NR	6.71												6.71%		
Mississippi Power Co.	5.4	605417BT0	Sr Nts'G'	7/1/2035	NR	5.86	5.80	5.85	5.83									5.43%	4.90%	
NRG Energy, Inc.	7.38	629377AU6	Sr Nts	2/1/2016	NR	7.12	7.12	7.12	7.10	7.11	7.11	7.11	7.11	7.11	7.11	7.11	7.11	7.11%	7.11%	
Nevada Power	8.25	641423AZ1	Gen & Ref 'A'	6/1/2011	NR	8.05	8.10	8.14	8.19	8.25								8.15%		
NorthWestern Corp.	5.88	668074AM9	Sr Sec Nts	11/1/2014	NR	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72%	5.72%	
Orange & Rockland Utils	7	684065AU9	Deb 'G'	3/1/2029	NR	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69	6.69%	6.69%	
Exelon Corp.	5.95	693304AB3	1st&Ref Mtg	11/1/2011	NR	5.72	5.74	5.76	5.79									5.75%		
Exelon Corp.	4.75	693304AD9	1st&Ref Mtg	10/1/2012	NR	4.47	4.48	4.51	4.50									4.61	4.51%	4.61%
Exelon Corp.	5.9	693304AG2	1st Ref Mtg	5/1/2034	NR	5.73	5.68	5.76	5.74									4.65	5.51%	4.65%
Exelon Corp.	5.95	693304AH0	1st Ref Mtg	10/1/2036	NR	5.56	5.50	5.59	5.57									4.63	5.37%	4.63%
Exelon Corp.	5.7	693304AJ6	1st Ref Mtg	3/15/2037	NR	5.60	5.54	5.63	5.61									4.56	5.39%	4.56%
PPL Energy Supply	6.4	69352JAC1	Sr Nts 'A'	11/1/2011	NR	6.13	6.16	6.19	6.21	6.25	6.28	6.31	6.34	6.37	6.40	6.40	6.40	6.28%	6.40%	
PSEG Power LLC	7.75	69362BAF9	Sr Nts	4/15/2011	NR	7.64	7.68											7.66%		
Pacific Gas & Electric Co.	4.2	694308GC5	1st	3/1/2011	NR	4.18	4.20											4.19%		
PacifiCorp	6.9	695114BU1	1st	11/15/2011	NR	6.57	6.60	6.63	6.66	6.70	6.74	6.78	6.82	6.85	6.89	6.89	6.74%	6		

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Rochester Gas & Electric	6.95	771367BR9	1st TT'	4/1/2011	NR	6.92	6.95											6.94%		
Savannah Electric&Power	5.5	804767DJ5	Sr Nts'F'	12/15/2028	NR	5.64	5.64	5.65	5.62	5.58	5.68	5.53	5.50	5.50	5.50	5.50	5.50	5.57%	5.50%	
Sierra Pacific Power	6.25	826418BB0	Gen & Ref'H'	4/15/2012	NR			5.85	5.85	5.85	5.85	5.85	5.85	5.85	5.85	5.85	5.85	5.85%	5.85%	
Sierra Pacific Resources	8.625	826428AH7	Sr Nts	3/15/2014	NR	8.37	8.37	8.37	8.37	8.37	8.37	8.37	8.37	8.37	8.37	8.37	8.37	8.37%	8.37%	
Sierra Pacific Resources	7.8	826428AJ3	Sr Nts	6/15/2012	NR	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65%	7.65%	
Southern Indiana Gas & El	8.88	843163AP1	1st	6/1/2016	NR													7.03	7.03%	
Southern Indiana Gas & El	6.72	843163AX4	Sr Nts	8/1/2029	NR													5.25	5.25%	
TECO Energy, Inc.	7.2	872375AC4	Nts	5/1/2011	NR	7.10	7.13	7.16	7.20									7.15%		
TECO Energy, Inc.	7	872375AG5	Nts	5/1/2012	NR	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43%	6.45%	
Tennessee Valley Authority	8.25	880591BL5	Pwr Bonds '92D	4/15/2042	NR	7.26	7.29	7.32	7.34	7.37	7.41	7.45	7.49	7.53	7.57	7.57	7.65	7.44%	7.60%	
Tennessee Valley Authority	6.235	880591CF7	Pwr Bonds '95B	7/15/2045	NR	5.70	5.67	5.66	5.71	5.53	5.58	5.56	5.42	5.16	5.30	5.30	5.22	5.50%	5.27%	
Tennessee Valley Authority	5.98	880591CK6	Pwr Bonds '96A	4/1/2036	NR	5.31	5.22	5.20	5.13	5.03	5.19	5.00	4.65	4.29	4.52	4.52	4.33	4.87%	4.46%	
Tennessee Valley Authority	6.15	880591CP5	Pwr Bonds '98B	1/15/2038	NR	5.27	5.16	5.18	5.13	5.02	5.18	5.01	4.60	4.26	4.48	4.48	4.34	4.84%	4.43%	
Tennessee Valley Authority	5.88	880591CS9	Pwr Bonds '97C	4/1/2036	NR	5.24	5.16	5.13	5.09	4.97	5.12	4.95	4.68	4.27	4.50	4.50	4.31	4.83%	4.44%	
Tennessee Valley Authority	7.14	880591DL3	PwrBonds '00F	5/23/2012	NR	6.58	6.61	6.65	6.67	6.70	6.74	6.78	6.81	6.84	6.88	6.88	6.96	6.76%	6.91%	
Union Electric	7.69	906548BT8	Sub Cap Inc Sec'A'	12/15/2036	NR	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49%	
Washington Water Power	7.53	94068VA41	Secd MTN	5/5/2023	NR	6.45	6.34	6.36	6.34									5.67	6.23%	
West Penn Power Co.	6.625	955278BF2	Nts	4/15/2012	NR													6.53	6.53%	
Wisconsin Energy Corp.	6.5	976657AC0	Sr Nts	4/1/2011	NR	6.43	6.46											6.45%		
Wisconsin Electric Power Company	6.875		Deb	12/1/2095	NR	6.28	6.20	6.22	6.12	5.91	6.02	5.82	5.29	4.88	4.86	4.86	4.89	5.61%	4.87%	

Counts of data

413 411 401 401 387 386 383 384 382 380 379 390 422 399

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
AAA's	4.75%	4.60%
AA's	6.06%	5.76%
A's	5.22%	5.01%
BBB's	5.52%	5.33%
BB's	6.23%	6.00%
CC's	14.74%	15.48%
D	9.75%	10.84%
NR's	6.07%	5.78%
ALL	5.56%	5.33%
BBB- & Above	5.34%	5.14%
BB- & Above	5.36%	5.16%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Tennessee Valley Authority	6.75	880591CJ9	Global Pwr Bonds'95E	11/1/2025	AAA	4.44	4.44	4.39	4.34	4.00	4.22	3.85	3.39	3.20	3.39	3.22	2.98	3.82%	3.20%	
Tennessee Valley Authority	6.25	880591CU4	Pwr Bonds '97E	12/15/2017	AAA	3.15	3.22	3.23	3.00	2.76	2.90	2.10	1.68	1.66	1.78	1.67	1.49	2.39%	1.65%	
Tennessee Valley Authority	6	880591CW0	Global Pwr Bonds '98C	3/15/2013	AAA	0.55	0.84	1.04	1.05	1.06	1.36	1.44	1.60	1.93	0.02	0.02	0.02	0.91%	0.02%	
Tennessee Valley Authority	7.125	880591DM1	Global Pwr Bonds '00G	5/1/2030	AAA	4.83	4.68	4.66	4.59	4.44	4.71	4.34	3.81	3.39	3.63	3.39	3.24	4.14%	3.42%	
Tennessee Valley Authority	4.88	880591DS8	Global Pwr Bonds'01D	12/15/2016	AAA	2.78	2.90	2.85	2.68	2.32	2.49	1.68	1.29	1.27	1.36	1.38	1.24	2.02%	1.33%	
Tennessee Valley Authority	4.7	880591DV1	Pwr Bonds'03 B"	7/15/2033	AAA	4.95	4.81	4.83	4.73	4.54	4.76	4.54	4.03	3.54	3.88	3.71	3.51	4.32%	3.70%	
Tennessee Valley Authority	4.75	880591DW9	Pwr Bonds'03C	8/1/2013	AAA	1.55	0.46	0.56	0.44	0.40	0.53	0.57	0.62	0.85	1.00	1.17	1.28	0.79%	1.15%	
Tennessee Valley Authority	4.38	880591DY5	Global Pwr Bonds'05B	6/15/2015	AAA	1.84	1.95	1.95	1.71	1.49	1.66	1.34	1.02	1.18	1.19	1.27	1.22	1.49%	1.23%	
Madison Gas & Electric	7.7	557497AL8	1st	2/15/2028	AA-	7.44	7.44	7.45	7.45	7.44	7.45	7.44	7.44	7.44	7.44	7.43	7.44	7.44	7.44%	
Madison Gas & Elec Co MTN E	7.12	5574A0AB3	Tranche # Tr 00002	4/1/2032	AA-	6.18	6.10	6.02	5.98	5.71	5.73	5.47	4.98	4.46	4.59	4.46	4.32	5.33%	4.46%	
Madison Gas & Elec Co MTN E	5.26	5574ADAC1	MTN	9/29/2017	AA-	3.97	4.07	3.87	3.80									1.97	3.54%	
Alabama Power Co.	5.5	010392DZ8	Sr Nts 'Q'	10/15/2017	A	3.40	3.38	3.46	3.41	2.98	2.68	2.68	2.26	2.14	2.35	2.15	2.09	2.75%	2.20%	
Alabama Power Co.	5.88	010392EB0	Sr Nts 'S'	12/1/2022	A	4.58	4.61	4.69	4.64	4.31	4.22	4.22	3.51	3.22	3.65	3.31	3.22	4.02%	3.39%	
Alabama Power Co.	5.7	010392EC8	Sr Nts 'T'	2/15/2033	A	5.47	5.40	5.45	5.42	5.10	5.05	5.05	4.36	4.00	4.37	3.95	3.91	4.79%	4.08%	
Alabama Power Co.	5.6	010392EE4	Sr Nts 'V'	3/15/2033	A	5.57	5.49	5.56	5.53	5.27	5.16	5.16	4.61	4.05	4.62	4.20	4.16	4.95%	4.33%	
Alabama Power Co.	5.12	010392EK0	Sr Nts 'Z'	2/15/2019	A	4.02	4.05	3.99	3.94	3.61	3.47	3.47	2.79	2.45	2.85	2.51	2.42	3.30%	2.59%	
Alabama Power Co.	5.75	010392EQ7	Sr InsurOrlyNts'EE'	1/15/2036	A	6.05	5.93	5.89	5.85	5.86	5.81	5.81	5.74	5.74	5.74	5.76	5.83%	5.75%		
Alabama Power Co.	5.2	010392ER5	Sr Nts'FF'	1/15/2016	A	2.70	2.89	2.76	2.71	2.28	2.04	2.04	1.61	1.59	1.80	1.65	1.59	2.14%	1.68%	
Alabama Power Co.	5.55	010392EW4	Sr Nts'07A	2/1/2017	A	3.45	3.44	3.51	3.46	3.03	2.74	2.74	2.36	2.34	2.55	2.35	2.29	2.86%	2.40%	
Alabama Power Co.	6	010392EX2	Sr InsurMthlyNts'07C	10/15/2037	A	6.00	5.96	6.02	5.99	5.99	5.94	5.94	5.97	5.93	5.96	5.94	5.91	5.96%	5.94%	
Alabama Power Co.	4.85	010392EY0	Sr Nts '07D	12/15/2012	A	1.03	0.96	1.04	0.95	0.78	0.73	0.73	0.75	0.90	0.97	0.77	0.69	0.86%	0.81%	
Alabama Power Co.	6.12	010392EZ7	Sr Nts'08A	5/15/2038	A	5.47	5.43	5.46	5.43	5.15	5.11	5.11	4.46	4.10	4.42	4.05	4.06	4.85%	4.18%	
Detroit Edison Co.	5.2	250847DT4	Sr Nts	10/15/2012	A	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.23	0.68	1.01	1.38	0.86	0.36%	1.08%	
Detroit Edison Co.	6.35	250847DU1	Sr Nts	10/15/2032	A	5.51	5.38	5.55	5.57	5.29	5.47	5.20	4.81	4.34	4.42	4.39	4.18	5.01%	4.33%	
Detroit Edison Co.	5.4	250847DV9	Sr Nts'D'	8/1/2014	A	2.61	2.82	2.14	2.05	1.49	1.60	1.44	1.52	1.76	1.85	1.93	1.52	1.89%	1.77%	
Detroit Edison Co.	4.8	250847DX5	Sr(Se)Nts'AR'	2/15/2015	A	2.45	2.64	2.71	2.66	2.40	2.49	2.19	0.94	1.07	1.17	1.19	1.29	1.93%	1.22%	
Detroit Edison Co.	5.45	250847DZ0	Sr(Se)Nts'BR'	2/15/2035	A	5.52	5.40	5.46	5.43	5.15	5.32	5.07	4.66	4.17	4.51	4.22	4.06	4.91%	4.26%	
Detroit Edison Co.	5.7	250847EA4	Sr(Se)Nts'E'	10/1/2037	A	5.52	5.40	5.46	5.43	5.15	5.32	5.00	4.61	4.20	4.42	4.11	4.88%	4.16%		
Duke Energy Corp.	5.3	264399EM4	1st & Ref	10/1/2015	A	2.40	2.59	2.56	2.46	1.78	1.94	1.49	1.44	1.49	1.57	1.68	1.49	1.91%	1.58%	
Florida Power & Light	4.85	341081EN3	1st	2/1/2013	A	1.32	1.26	1.34	1.25	1.62	1.69	1.77	0.02	0.02	0.21	0.84	0.95%	0.36%		
Florida Power & Light	5.85	341081EP8	1st	2/1/2033	A	5.37	5.30	5.41	5.33	5.03	5.22	4.98	4.56	4.22	4.17	4.17	4.01	4.81%	4.12%	
Florida Power & Light	5.625	341081EQ6	1st	4/1/2034	A	5.32	5.25	5.41	5.33	5.03	5.22	4.88	4.49	4.22	4.05	4.07	4.01	4.77%	4.04%	
Florida Power & Light	5.95	341081ER4	1st	10/1/2033	A	5.32	5.25	5.41	5.33	5.01	5.22	4.90	4.46	4.20	4.07	4.01	4.77%	4.06%		
Florida Power & Light	4.95	341081ET0	1st	6/1/2035	A	5.32	5.15	5.36	5.28	4.98	5.17	4.81	4.42	4.15	4.07	4.10	3.96	4.73%	4.04%	
Florida Power & Light	5.4	341081EU7	1st Mtg Bd	9/1/2035	A	5.27	5.24	5.41	5.28	4.95	5.15	4.88	4.46	4.15	4.07	4.10	4.06	4.75%	4.08%	
Florida Power & Light	5.65	341081EV5	1st	2/1/2037	A	5.32	5.25	5.41	5.33	5.03	5.22	4.88	4.46	4.18	4.07	4.01	4.77%	4.05%		
Florida Power & Light	6.2	341081EX1	1st	6/1/2036	A	5.32	5.25	5.41	5.33	5.03	5.22	4.90	4.46	4.20	4.10	4.06	4.78%	4.09%		
Florida Power & Light	5.85	341081EY9	1st	5/1/2037	A	5.35	5.25	5.37	5.33	5.03	5.22	4.88	4.46	4.20	4.10	4.07	4.78%	4.09%		
Florida Power Corp.	5.9	341099CB3	1st	3/1/2033	A	5.57	5.45	5.53	5.50	5.22	5.39	5.15	4.56	4.20	4.07	4.10	4.06	4.90%	4.08%	
Florida Power Corp.	4.8	341099CC1	1st	3/1/2013	A	1.32	1.45	1.54	1.45	1.68	1.51	1.57	0.02	0.02	0.21	0.98	0.98%	0.40%		
Florida Power Corp.	6.35	341099CH0	1st	9/15/2037	A	5.47	5.45	5.49	5.43	5.37	5.56	4.95	5.03	4.64	4.32	4.29	4.16	5.01%	4.26%	
Georgia Power Co.	5.125	373334FN6	Sr Nts 'K'	11/15/2012	A	1.03	1.01	1.09	1.00	0.02	0.02	0.02	0.02	0.02	0.56	1.03	0.92	0.95	0.64%	0.97%
Georgia Power Co.	5.75	373334FS5	Sr Nts 'N'	4/15/2023	A	4.73	4.76	4.69	4.64	4.29	4.51	4.24	3.73	3.50	3.70	3.36	3.27	4.12%	3.44%	
Georgia Power Co.	4.9	373334FT3	Sr Nts 'Q'	9/15/2013	A	1.07	1.20	1.29	1.20	0.50	0.85	0.83	0.89	1.15	1.06	1.02	1.02	1.01%	1.03%	
Georgia Power Co.	5.8	373334FZ9	Sr Nts 'Y'	4/15/2035	A	6.07	5.99	6.06	6.03	5.76	5.93	5.66	5.17	5.02	4.97	4.55	4.86	5.51%	4.79%	
Georgia Power Co.	5.25	373334GA3	Sr Nt Ser Z	12/15/2015	A	2.55	2.74	2.76	2.66	2.46	2.41	1.44	1.54	1.68	1.70	1.50	1.69	2.09%	1.63%	
Georgia Power Co.	5.65	373334GC9	Sr Nts'07A	3/1/2037	A	5.42	5.40	5.61	5.53	5.25	5.37	5.12	4.64	4.22	4.42	4.05	4.11	4.93%	4.19%	
Georgia Power Co.	5.7	373334GE5	Sr Nts'07B	6/1/2017	A	3.25	3.39	3.46	3.34	2.90	3.02	2.60	2.41	2.54	2.40	2.10	2.04	2.79%	2.18%	
Gulf Power Co.	4.35	402479BT5	Sr Nts 'G'	7/15/2013	A	1.92	2.05	2.14	2.06	1.72	1.80	1.80	1.82	2.02	1.80	1.76	1.76	1.89%	1.77%	
Gulf Power Co.	5.65	402479BW8	Sr Nts'L'	9/1/2035	A	6.22	5.84	5.91	5.88	5.61	5.77	5.51	5.03	4.39	4.72	4.56	5.06	5.37%	4.78%	
Gulf Power Co.	5.3	402479BX6	Sr Nts'M'	12/1/2016	A	3.15	3.33	3.41	3.36	3.10	2.78	2.41	2.68	2.77	2.95	2.75	2.69	2.95%	2.80%	
Northern IllinoisGas	6.558	665228B04	1st	2/15/2028	A	6.03	5.96	5.98	5.96	5.69	5.86	5.61	5.07	4.54	4.73	4.60	4.44	5.37%	4.59%	
Northern IllinoisGas	7.2	665228BV3	1st	5/15/2016	A	3.17	3.31	3.30	3.21	2.76	2.85	2.54	2.29	2.41	2.49	2.51	1.94	2.73%	2.31%	
Northern Sts Pwr (Minn)	7.125	665772BN8	1st	7/1/2025	A	5.08	5.06	4.99	4.89	4.51	4.73	4.39	3.93	4.44	3.66	3.71	3.47	4.41%	3.61%	
Northern Sts Pwr (Minn)	6.5	665772BQ1	1st	3/1/2028	A	5.32	5.25	5.01	4.98	4.71	4.73	4.64	4.15	3.85	3.88	3.61	4.49%	3.75%		
Northern Sts Pwr (Minn)	8	665772BW8	1st	8/28/2012	A	1.13	1.07	1.14	1.05	0.02	0.02	0.12	0.84	1.49	1.99	2.63	0.91	1.03%	1.84%	
Northern Sts Pwr (Minn)	5.25	665772CA5	1st	7/15/2035	A	5.29	5.22	5.28	5.23	4.95	5.17	4.81	4.46	4.05	4					

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Potomac Electric Power	5.75	737679CY4	Sr Nts	4/15/2034	A	5.57	5.45	5.71	5.68	5.42	5.56	5.32	4.88	4.56	4.71	4.56	4.41	5.15%	4.56%	
Potomac Electric Power	5.4	737679CZ1	Sr Nts	6/1/2035	A	5.57	5.44	5.46	5.43	5.42	5.56	5.32	4.88	4.56	4.73	4.56	4.41	5.11%	4.57%	
Public Serv. Colorado	5.5	744448BX8	1st Coll Tr Ser 15	4/1/2014	A	1.92	1.97	2.10	2.00	1.82	1.57	1.48	1.43	1.67	0.05	0.14	0.83	1.42%	0.34%	
South Carolina Electric & Gas Co.	7.12	837004BC3	1st	6/15/2013	A	1.58	1.71	1.79	1.70	1.41	1.63	1.73	1.88	2.32	2.54	2.76	1.59	1.89%	2.30%	
South Carolina Electric & Gas Co.	6.62	837004BV1	1st	2/1/2032	A	5.52	5.40	5.46	5.43	5.15	5.32	5.03	4.54	4.27	4.42	4.27	4.39	4.93%	4.36%	
South Carolina Electric & Gas Co.	5.8	837004BW9	1st	1/15/2033	A	5.52	5.40	5.46	5.43	5.15	5.32	4.98	4.51	4.28	4.42	4.27	4.11	4.90%	4.27%	
South Carolina Electric & Gas Co.	5.3	837004BX7	1st	5/15/2033	A	5.52	5.39	5.46	5.43	5.15	5.32	4.93	4.46	4.29	4.44	4.29	4.11	4.90%	4.28%	
South Carolina Electric & Gas Co.	5.25	837004BV5	1st	11/1/2018	A	3.78	3.71	3.84	3.89	3.34	3.49	3.02	2.66	2.49	2.66	2.59	2.47	3.16%	2.57%	
South Carolina Electric & Gas Co.	5.25	837004BZ2	1st	3/1/2035	A	5.62	5.49	5.56	5.53	5.20	5.37	5.03	4.59	4.54	4.56	4.54	4.36	5.03%	4.49%	
Southern California Edison Co.	5	842400ER0	1st & Ref '04A	1/15/2014	A	1.57	1.72	1.85	1.55	1.66	1.78	1.67	0.40	0.66	0.63	0.72	0.93	1.26%	0.76%	
Southern California Edison Co.	6	842400ES8	1st & Ref '04B	1/15/2034	A	5.42	5.30	5.29	5.33	5.05	5.22	4.88	4.51	4.03	4.00	4.03	4.01	4.76%	4.01%	
Southern California Edison Co.	5	842400EY5	1st & Ref'05A	1/15/2016	A	2.60	2.79	2.86	2.81	2.41	2.44	2.13	1.32	1.44	1.56	1.72	1.44	2.04%	1.24%	
Southern California Edison Co.	5.55	842400EZ2	1st & Ref'05B	1/15/2036	A	5.42	5.30	5.36	5.33	5.05	5.22	4.88	4.51	4.07	4.17	4.03	4.01	4.78%	4.07%	
Southern California Edison Co.	5.35	842400FA6	1st & Ref'05E	7/15/2035	A	5.42	5.30	5.36	5.31	5.03	5.20	4.86	4.51	4.10	4.17	4.05	4.01	4.78%	4.08%	
Southern California Edison Co.	5.62	842400FC2	1st & Ref'06A	2/1/2036	A	5.42	5.30	5.36	5.33	5.09	5.22	4.88	4.51	4.07	4.17	4.03	4.06	4.79%	4.09%	
Southern California Edison Co.	5.55	842400FF5	1st & Ref'06E	1/15/2037	A	5.42	5.30	5.41	5.33	5.05	5.22	4.88	4.51	4.07	4.17	4.03	4.06	4.79%	4.09%	
Wisconsin Public Service	7.125	976843AX0	1st	7/1/2023	A	6.99	6.99	6.99	6.99	7.03	7.03	7.03	7.03	7.03	7.02	7.03	7.01	7.01%	7.02%	
Wisconsin Public Service	4.875	976843BC5	Sr(Sec)Nts	12/1/2012	A	1.23	1.36	1.39	1.30	2.01	0.02	0.02	0.02	0.36	0.67	0.89	0.89	0.85%	0.82%	
Wisconsin Public Service	4.8	976843BD3	Sr(Sec)Nts	12/1/2013	A	1.67	1.80	1.84	1.76	2.06	0.93	0.53	0.57	0.83	0.97	1.06	1.12	1.26%	1.05%	
Wisconsin Public Service	5.55	976843BE1	Sr(Sec)Nts	12/1/2036	A	5.92	5.84	5.86	5.48	5.10	5.27	5.10	4.59	4.07	4.32	4.39	4.21	5.01%	4.31%	
Avista Corp.	5.45	95379BAH0	1st	12/1/2019	A-				4.48	4.39	4.06	3.87	3.87	3.24	2.95	3.35	3.01	2.92	3.61%	3.09%
Avista Corp.	6.25	95379BAK3	1st Mtg Bd	12/1/2035	A-				6.17	6.13	5.87	5.81	5.21	4.70	5.07	4.65	4.61	5.40%	4.63%	
Avista Corp.	5.7	95379BAM9	1st	7/1/2037	A-	6.07	5.99	6.01	5.98	5.72	5.66	5.66	5.06	4.55	4.92	4.50	4.46	5.38%	4.63%	
CenterPoint Energy Houston	5.7	15189XAC2	Gen Mtge'J2'	3/15/2013	A-	1.72	1.33	1.34	1.25	1.08	0.93	0.93	1.05	1.20	0.02	0.40	1.53	1.07%	0.65%	
CenterPoint Energy Houston	6.95	15189XA0D	Gen Mtge'K2'	3/15/2033	A-	5.77	5.70	5.56	5.53	5.27	5.21	5.21	4.76	4.55	4.60	4.46	4.31	5.08%	4.46%	
CenterPoint Energy Houston	5.75	15189XAG3	Gen Mtge'M2'	1/15/2014	A-	1.97	2.17	2.20	1.80	1.47	1.22	1.22	1.17	1.55	1.22	0.94	1.18	1.51%	1.11%	
CenterPoint Energy Houston	5.6	15189XAH1	Gen Mtge'L2'	7/1/2023	A-	5.08	5.11	5.19	5.14	4.81	4.62	4.62	4.14	3.95	3.61	3.51	3.27	4.42%	3.46%	
Cincinnati Gas & Electric Co.	6.9	172070BT0	Deb	6/1/2025	A-	5.03	5.06	5.14	5.09	4.71	4.52	4.62	4.09	3.80	4.56	4.46	4.22	4.60%	4.41%	
Cincinnati Gas & Electric Co.	5.7	172070CN2	Deb	9/15/2012	A-	1.03	1.12	1.24	0.95	0.80	0.63	0.63	0.95	1.05	1.43	2.00	0.92	1.06%	1.45%	
Commonwealth Edison	7.625	202795FJ4	1st Ser 92	4/15/2013	A-	1.53	1.67	1.79	1.70	1.49	1.53	1.50	1.60	0.02	0.20	1.45	1.48%			
Commonwealth Edison	7.5	202795FM7	1st Ser 94	7/1/2013	A-	1.53	1.66	1.79	1.70	1.49	1.53	1.50	1.60	2.51	2.76	1.54	1.76%	2.27%		
Commonwealth Edison	6.15	202795HE3	1st Ser 98	3/15/2012	A-	0.84	1.00	0.83	0.66	0.71	0.66	0.66	0.82	0.85	0.97	0.80%	0.97%			
Commonwealth Edison	5.875	202795HG8	1st Ser 100	2/1/2033	A-	5.72	5.65	5.76	5.63	5.37	5.36	5.36	4.86	4.45	4.88	4.59	4.34	5.16%	4.60%	
Commonwealth Edison	4.7	202795HH6	1st Ser 101	4/15/2015	A-	2.60	2.74	2.76	2.71	2.18	1.89	1.89	1.46	1.64	1.34	1.54	1.74	2.04%	1.54%	
Commonwealth Edison	5.9	202795HK9	1st Ser 103	3/15/2036	A-	5.72	5.65	5.75	5.61	5.33	5.33	5.33	4.91	4.50	4.46	4.42	4.37	5.12%	4.42%	
Commonwealth Edison	5.95	202795HN3	1st Ser 104	8/15/2016	A-	3.15	3.29	3.41	3.36	2.88	2.59	2.59	2.31	2.39	2.34	2.44	2.14	2.74%	2.31%	
Connecticut Lt & Pwr	7.875	207597CZ6	1st & Ref D	10/1/2024	A-	5.38	5.41	5.44	5.39	4.81	4.62	4.62	3.99	3.70	4.12	4.00	3.82	4.61%	3.98%	
Connecticut Lt & Pwr	5	207597DT9	1st & Ref'05A	4/1/2015	A-	2.45	2.64	2.66	2.61	2.19	1.89	1.89	1.46	1.44	1.12	1.15	1.39	1.91%	1.22%	
Connecticut Lt & Pwr	5.62	207597DU6	1st & Ref'05B	4/1/2035	A-	5.72	5.64	5.56	5.53	5.27	5.21	5.21	4.61	4.10	4.71	4.03	4.41	5.00%	4.38%	
Connecticut Lt & Pwr	6.35	207597DV4	1st & Ref'06A	6/1/2036	A-	5.62	5.55	5.51	5.48	5.22	5.16	5.16	4.66	4.15	4.64	4.49	4.31	5.00%	4.48%	
Connecticut Lt & Pwr	5.38	207597DW2	1st & Ref'07A	3/1/2017	A-	3.40	3.58	3.61	3.56	3.08	2.79	2.79	2.36	2.34	2.28	2.41	2.44	2.89%	2.38%	
Connecticut Lt & Pwr	5.75	207597DX0	1st & Ref'07B	3/1/2037	A-	5.77	5.70	5.61	5.58	5.32	5.26	5.26	4.66	4.15	4.71	4.59	4.41	5.09%	4.57%	
Consolidated Edison, Inc.	5.62	209111DZ3	Deb '02A	7/1/2012	A-	1.08	1.15	1.16	0.95	0.76	0.58	0.58	0.50	0.75	2.32	2.74	0.95	1.13%	2.00%	
Consolidated Edison, Inc.	4.88	209111EA7	Deb '02B	2/1/2013	A-	1.32	1.46	1.49	1.40	1.08	0.88	0.88	1.24	0.96	0.02	0.47	1.16	1.03%	0.55%	
Consolidated Edison, Inc.	5.88	209111EB5	Deb '03A	4/1/2033	A-	5.52	5.40	5.46	5.43	5.17	5.11	5.11	4.76	4.30	4.56	4.51	4.36	4.97%	4.48%	
Consolidated Edison, Inc.	3.85	209111EC3	Deb'03B	6/15/2013	A-	1.42	1.55	1.59	1.51	1.07	0.93	0.93	1.34	1.11	1.57	1.67	1.07	1.31%	1.44%	
Consolidated Edison, Inc.	4.7	209111EE9	Deb'04A	2/1/2014	A-	2.11	2.32	2.39	2.05	1.66	1.37	1.37	1.42	1.35	0.80	0.93	1.08	1.57%	0.94%	
Consolidated Edison, Inc.	5.7	209111EF6	Deb'04B	2/1/2034	A-	5.52	5.40	5.46	5.43	5.22	5.16	5.16	4.66	4.25	4.32	4.54	4.36	4.96%	4.41%	
Consolidated Edison, Inc.	5.3	209111EH2	Deb '05A	3/1/2035	A-	5.52	5.39	5.46	5.43	5.17	5.11	5.11	4.61	4.25	4.27	4.28	4.16	4.90%	4.24%	
Consolidated Edison, Inc.	5.25	209111EJ8	Deb '05B	7/1/2035	A-	5.57	5.49	5.56	5.53	5.27	5.21	5.21	4.76	4.30	4.39	4.44	4.51	5.02%	4.45%	
Consolidated Edison, Inc.	5.38	209111EK5	Deb'05C	12/15/2015	A-	2.60	2.79	2.76	2.71	2.18	1.89	1.89	1.76	1.79	1.61	1.67	1.59	2.10%	1.62%	
Consolidated Edison, Inc.	5.85	209111EL3	Deb'06A	3/15/2036	A-	5.52	5.40	5.46	5.43	5.17	5.11	5.11	4.61	4.25	4.22	4.32	4.16	4.90%	4.23%	
Consolidated Edison, Inc.	6.2	209111EM1	Deb'06B	6/15/2036	A-	5.47	5.40	5.46	5.43	5.17	5.11	5.11	4.61	4.25	4.34	4.39	4.21	4.91%	4.31%	
Consolidated Edison, Inc.	5.5	209111EN9	Deb'06C	9/15/2016	A-	2.95	3.14	3.01	2.96	2.53	2.19	2.19	1.81	1.84	1.78	1.83	1.59	2.32%	1.73%	
Consolidated Edison, Inc.	5.3	209111EP4	Deb'06D	12/1/2016	A-	2.85	3.14	3.16	3.01	2.53	2.19	2.19	1.86	1.94	1.66	1.90	1.74	2.35%	1.77%	
Consolidated Edison, Inc.	5.7	209111EQ2	Deb'06E	12/1/2036	A-	5.52	5.40	5.46	5.43	5.17	5.21	5.21	4.61	4.35	4.37	4.34	4.1			

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Duke Energy Corp.	5.625	264399EF9	Sr Nts	11/30/2012	A-	1.18	1.17	1.24	1.15	2.07	0.02	0.02	0.02	0.67	0.62	1.01	1.00	0.85%	0.88%
Energy East Corp.	6.75	29266MAD1	Nts	6/15/2012	A-	1.98	2.03	2.04	1.45	1.08	1.30	2.02	2.43	3.06	3.62	4.06	1.77	2.24%	3.15%
Energy East Corp.	6.75	29266MAE9	Nts	9/15/2033	A-	6.62	6.30	6.36	6.28	5.90	6.37	6.37	5.98	6.05	5.88	6.00	6.21	6.19%	6.03%
Entergy Arkansas	6.38	29364DAK6	1st	11/1/2034	A-	6.43	6.42	6.46	6.43	6.34	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.39%	6.37%
Entergy Arkansas	5.66	29364DAL4	1st	2/1/2025	A-	5.87	5.42	5.45	5.42	5.17	5.66	5.29	5.20	5.00	5.30	4.96	4.87	5.30%	5.04%
Entergy Mississippi	5.15	29364NAH1	1st	2/1/2034	A-	2.22	2.35	2.54	2.45	2.26	2.23	2.29	0.02	0.45	1.61	1.52	1.53	1.79%	1.55%
Entergy Mississippi	4.95	29364NAK4	1st	6/1/2018	A-	4.91	4.92	4.91	4.91	4.90	4.94	4.95	4.95	4.95	4.94	4.94	4.94	4.93%	4.94%
Entergy Mississippi	6.25	29364NAL2	1st	4/1/2034	A-	6.40	6.27	6.29	6.27	6.04	6.05	6.00	6.03	5.95	5.96	5.96	5.97	6.10%	5.96%
Georgia Power Co.	5.65	373334GB1	Sr InsurQtrlyNts'06A	12/15/2040	A-	5.88	5.69	5.73	5.65	5.72	5.88	5.66	5.64	5.64	5.64	5.64	5.64	5.70%	5.64%
Idaho Pwr	6.6	45138LAJ2	Sec M-T Nts 'C'	3/2/2011	A-	0.68												0.68%	
Idaho Pwr	4.75	45138LAK9	Sec M-T Nts'D'	11/15/2012	A-	1.38	1.04	1.03	0.88	0.02	0.02	0.02	0.13	0.82	1.23	1.46	1.40	0.79%	1.36%
Idaho Pwr	6	45138LAL7	Sec M-T Nts'D'	11/15/2032	A-	5.69	5.59	5.61	5.55	5.25	5.42	5.17	4.76	4.46	4.88	4.59	4.41	5.12%	4.63%
Idaho Pwr	4.25	45138LAM5	Sec M-T Nts 'E'	10/1/2013	A-	1.51	1.62	1.70	1.60	0.82	0.93	0.94	0.96	1.44	1.69	1.23	0.97	1.28%	1.30%
Idaho Pwr	5.5	45138LAN3	Sec M-T Nts 'E'	4/1/2033	A-	5.67	5.58	5.60	5.53	5.25	5.42	5.17	4.73	4.46	4.83	4.54	4.36	5.10%	4.58%
Idaho Pwr	5.5	45138LAP8	Sec M-T Nts'E'	3/15/2034	A-	5.69	5.59	5.60	5.54	5.25	5.42	5.17	4.73	4.46	4.81	4.53	4.36	5.10%	4.57%
Idaho Pwr	5.875	45138LAR6	Sec M-T Nts'E'	8/15/2034	A-	5.68	5.59	5.61	5.55	5.27	5.42	5.17	4.73	4.46	4.84	4.56	4.37	5.10%	4.59%
Idaho Pwr	5.3	45138LAR4	Sec M-T Nts'F'	8/15/2035	A-	5.67	5.59	5.61	5.55	5.27	5.44	5.17	4.73	4.46	4.86	4.56	4.38	5.11%	4.60%
KeySpan Corp.	8	49337WAC4	Nts	11/15/2030	A-	6.17	6.10	6.11	5.98	5.66	5.83	5.59	5.10	4.67	4.86	4.68	5.16	5.49%	4.90%
KeySpan Corp.	4.65	49337WAG5	Nts	4/1/2013	A-	2.32	2.45	2.09	1.91	1.80	1.93	1.96	2.01	2.30	0.35	0.99	1.87	1.83%	1.07%
KeySpan Corp.	5.88	49337WAH3	Nts	4/1/2033	A-	6.02	5.94	5.96	5.88	5.61	5.76	5.51	5.03	4.61	4.76	4.64	4.46	5.35%	4.62%
MidAmerican Energy Co.	5.65	595620AF2	Sr Nts	7/15/2012	A-	1.03	1.18	1.34	1.05	0.33	0.02	0.79	1.50	1.91	0.86	0.81	0.20	0.92%	0.62%
MidAmerican Energy Co.	5.95	595620AG0	Sr Nts	7/15/2017	A-	3.45	3.44	3.51	3.46	5.39									
MTN-tranche # Tr 00008	10/15/2036	A-	5.57	5.50	5.51	5.53	5.25	5.42	5.12	4.76	4.54	4.42	4.68	4.51	5.07%	4.54%			
Oncor Electric Delivery	6.38	68233DAL1	Sr Sec Nts	1/15/2015	A-	2.70	2.79	2.91	2.71	2.52	2.71	2.29	1.19	1.46	1.57	1.54	1.55	2.16%	1.55%
Oncor Electric Delivery	7.25	68233DAP2	Sr Sec Nts	1/15/2033	A-	5.79	5.72	5.89	5.69	5.44	5.64	5.32	5.05	4.51	4.56	4.73	4.66	5.25%	4.65%
Oncor Electric Delivery	7	68233DAR8	Deb	9/1/2022	A-	4.88	4.83	5.22	5.02	4.54	4.72	4.32	3.85	4.03	3.88	4.00	3.77	4.42%	3.88%
Oncor Electric Delivery	6.38	68233DAS6	Sr Sec Nts	5/1/2012	A-	1.40	1.50	1.58	1.26	1.65	1.99	2.30	2.85	3.31	3.72		1.50	2.10%	2.61%
Oncor Electric Delivery	7	68233DAT4	Sr Sec Nts	5/1/2032	A-	5.78	5.71	5.89	5.69	5.44	5.61	5.27	5.03	4.51	4.59	4.66	4.56	5.23%	4.60%
PSI Energy, Inc.	5	693627AX9	Deb	9/15/2013	A-	1.57	1.70	1.79	1.51	0.82	1.05	1.07	1.12	1.41	1.56	1.71	1.52	1.40%	1.60%
PSI Energy, Inc.	6.12	693627AY7	Deb	10/15/2035	A-	5.82	5.75	5.81	5.78	5.49	5.66	5.37	4.86	4.64	4.64	4.54	4.66	5.25%	4.61%
PSI Energy	6.05	693627AZ4	Deb	6/15/2016	A-	3.20	3.39	3.41	3.31	2.85	2.98	2.66	2.57	2.95	2.78	2.78	2.44	2.94%	
Penna P&L	7.375	709051CD6	1st	3/1/2014	A-	3.47	3.67	3.74	3.65	3.56	3.68	2.13	2.15	0.67	0.80	1.00	1.63	2.51%	1.14%
Portland Gen'l Elec	9.31	73651HAV3	M-T Nts	8/1/2011	A-	5.37	5.39	5.26	5.22	4.78	4.93	4.59	4.10	3.93	4.10	4.03	3.72	4.62%	3.95%
Public Serv., New Hamp.	5.25	744482BG4	1st 'L'	7/15/2014	A-	2.66	2.87	2.95	2.85	1.90	2.00	1.84	1.76	2.00	2.07	2.15	1.72	2.23%	1.98%
Public Service Electric and Gas	8	744567BA5	1st & Ref	6/1/2037	A-	6.12	6.05	6.16	6.13	5.86	5.86	5.61	5.12	5.15	5.29	5.15	4.96	5.62%	5.13%
Public Service Electric and Gas	5	744567BBS3	1st & Ref	7/1/2037	A-	6.05	5.95	2.01	6.05	5.76	5.83	5.56	5.07	4.90	5.03	4.89	4.71	5.15%	4.88%
Public Service Electric and Gas	9.25	744567CN6	1st & Ref CC	6/1/2021	A-	4.50	4.56	4.73	4.59	4.37	4.46	4.12	3.63	3.49	1.60	1.44	3.22	3.73%	2.09%
Public Service Electric and Gas	6.75	744567EP9	1st & Ref VV	1/1/2016	A-	3.20	3.12	3.32	3.13	2.95	3.05	1.93	1.65	1.78	1.83	1.85	1.84	1.84%	
Public Service Electric and Gas	5.12	74456QAJ5	Sec M-T Nts 'B'	9/1/2012	A-	1.03	1.17	1.04	0.95	0.02	0.11	0.32	0.84	1.50	1.52	1.96	0.91	0.95%	1.46%
Public Service Electric and Gas	5	74456QAK2	Sec M-T Nts 'B'	1/1/2013	A-	1.37	1.51	1.59	1.50	2.05	2.00	0.02	0.02	0.33	0.40	1.85	0.99	1.14%	1.08%
Public Service Electric and Gas	5.38	74456QAL0	Sec M-T Nts 'C'	9/1/2013	A-	1.07	1.20	1.34	1.25	0.57	0.73	0.78	1.17	1.43	1.40	1.44	0.92	1.11%	1.25%
Public Service Electric and Gas	5	74456QAN6	Sec M-T Nts'D'	8/15/2014	A-	2.06	2.27	2.45	2.42	1.35	1.46	1.30	1.36	1.61	1.60	1.67	1.32	1.74%	1.53%
Puget Sound Pwr & Lt	7.02	74531EAA0	Sr M-T Nts'A'	12/1/2027	A-	5.88	5.81	5.77	5.75	5.28	5.39	5.12	4.68	4.27	4.32	4.21	5.06%	4.27%	
Puget Sound Energy	6.74	74531EA8B	Sr M-T Nts'A'	6/15/2018	A-	4.45	4.48	4.33	4.24	3.73	3.83	3.49	3.10	3.20	3.17	3.12	2.77	3.66%	3.02%
Puget Sound Energy	7	74531EA6C	Sr M-T Nts 'B'	3/9/2029	A-	6.17	6.10	6.03	5.90	5.61	5.78	5.51	5.15	4.66	4.68	4.56	4.41	5.38%	4.55%
Puget Sound Energy	5.48	745332BU9	Sr Nts	6/1/2035	A-	5.82	5.69	5.66	5.63	5.29	5.44	5.20	4.78	4.45	4.69	4.49	4.26	5.12%	4.48%
Puget Sound Energy	5.2	745332BV7	Sr(Sec)Nts	10/1/2015	A-	3.10	3.29	3.26	2.81	2.17	2.26	1.90	1.68	2.19	1.96	2.12	1.89	2.39%	1.99%
Puget Sound Energy	6.72	745332BW5	Sr Nts	6/15/2036	A-	5.92	5.70	5.66	5.63	5.34	5.44	5.17	4.78	4.45	4.39	4.49	4.31	5.11%	4.40%
Puget Sound Energy	6.27	745332BX3	Sr(Sec)Nts	3/15/2037	A-	5.92	5.70	5.66	5.63	5.34	5.44	5.20	4.73	4.42	4.37	4.46	4.31	5.10%	4.38%
Southern Co. (The)	5.3	842587AB3	Sr Nts'07A	1/15/2012	A-	0.64	0.73	0.69	0.57	2.28	2.72	3.09			0.87	0.88	1.39%	0.88%	
Southwestern Public Serv	5.6	845743BK8	Sr Nts'E'	10/1/2016	A-	3.70	3.78	3.86	3.61	3.04	3.10	2.74	2.45	2.54	2.54	2.54	2.34	3.02%	2.47%
Southwestern Public Serv	6	845743BL6	Sr Nts'F'	10/1/2036	A-	5.97	5.79	5.86	5.78	5.44	5.56	5.37	5.07	4.68	4.83	4.78	4.86	5.33%	4.82%
Virginia Electric & Power Co.	4.75	927804EJ4	Sr Nts 'A'	3/1/2013	A-	1.17	1.31	1.29	1.20	1.46	1.56	1.63	1.83	0.02	0.02	0.08	1.08	1.05%	0.39%
Virginia Electric & Power Co.	5.25	927804EW0	Sr Nts 'C'	12/15/2015	A-	2.60	2.74	2.81	2.76	2.56	2.63	1.71	1.47	1.61	1.45	1.46	1.39	2.10%	1.43%
Virginia Electric & Power Co.	5.4	927804EZ3	Sr Nts'A'	1/15/2016	A-	2.63	2.79	2.86	2.81	2.51	2.46	2.17	1.29	1.51	1.38	1.50	1.49	1.21%	1.46%
Virginia Electric & Power Co.	6	927804FA7	Sr Nts'B'	1/15/2036	A-	5.42	5.42	5.44	5.40	5.15	5.22	4.90	4.81	4.28	4.27	4.27	4.21	4.90%	4.25%
Virginia Electric & Power Co.	6.95	927804FC3	Sr Nt 2007 Ser A	5/15/2037	A-	5.44	5.42	5.46	5.40	5.15	5.22	4.90	4.83	4.24	4.29	4.29	4.21	4.90%	4.26%
Virginia Electric & Power Co.	5.1	927804FD1	Sr Nt 2007 Ser C	11/30/2															

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AmerenUE	5.1	02360FAA4	Sr Sec Nts	10/1/2019	BBB+	4.38	4.41	4.34	4.29	3.96	3.77	3.77	3.14	2.85	3.17	3.10	2.87	3.67%	3.05%	
AmerenUE	5.3	02360FAB2	Sr Sec Nts	8/1/2037	BBB+	5.57	5.47	5.51	5.48	5.19	5.14	5.14	4.44	3.93	4.22	4.20	4.01	4.86%	4.14%	
AmerenUE	5.4	02360FAC0	Sr Sec Nts	2/1/2016	BBB+	3.20	3.19	3.26	3.21	2.78	2.24	2.24	1.86	1.89	2.07	2.07	2.09	2.51%	2.08%	
CenterPoint Energy Res	5.95	15189WAB6	Sr Nts	1/15/2014	BBB+	2.22	2.42	2.55	2.35	1.87	1.62	1.62	1.57	1.80				1.68	1.97%	1.68%
CenterPoint Energy Res	7.875	15189YAB2	Sr Nts	4/1/2013	BBB+	1.23	1.42	1.74	1.65	1.40	1.23	1.23	1.30	1.65	0.02	0.02	1.60	1.21%	0.55%	
CenterPoint Energy Res	6.25	15189YAD8	Sr Nts	2/1/2037	BBB+	6.02	5.95	5.96	6.08	5.77	5.71	5.71	5.16	5.10	5.17	5.03	4.86	5.54%	5.02%	
Consumers Energy Co.	5	210518CD6	1st 'O'	2/15/2012	BBB+	0.84	0.75	0.73	0.71	0.80	0.80	0.80	1.04	1.10			1.24	0.88%	1.24%	
Consumers Energy Co.	5.5	210518CE4	1st 'P'	8/15/2016	BBB+	2.95	3.14	3.11	3.11	2.63	2.49	2.49	2.26	2.29	2.46	2.46	2.09	2.62%	2.34%	
Consumers Energy Co.	5.15	210518CG9	1st	2/15/2017	BBB+	3.65	3.83	3.41	3.36	2.93	2.64	2.64	2.41	2.44	2.37	2.34	2.34	2.86%	2.35%	
Consumers Energy Co.	5.65	210518CL8	1st	4/15/2020	BBB+	4.18	4.15	4.19	4.14	3.81	3.62	3.62	3.14	2.95	3.15	3.07	3.07	3.59%	3.10%	
Consumers Energy Co.	5.8	210518CP9	1st	9/15/2035	BBB+	5.82	5.74	5.76	5.53	5.22	5.16	5.16	4.61	4.15	4.49	4.44	4.56	5.05%	4.50%	
Consumers Energy Co.	5.65	210518CQ7	1st	9/15/2018	BBB+	3.83	3.86	3.94	3.89	3.61	3.42	3.42	2.94	2.65	2.85	2.78	2.67	3.32%	2.77%	
Consumers Energy Co.	6.12	210518CR5	1st	3/15/2019	BBB+	3.98	4.01	4.09	4.04	3.69	3.45	3.45	3.01	2.75	2.78	2.76	2.82	3.40%	2.79%	
Duquesne Light Holdings, Inc.	5.5	266233AA3	Sr Nts	8/15/2015	BBB+	4.80	4.83	4.86	4.76	4.27	4.33	4.07	3.95	4.66	4.60	4.42	4.24	4.48%	4.42%	
Duquesne Light Holdings, Inc.	6.25	266233AB1	Sr Nts	8/15/2035	BBB+	7.97	7.89	7.91	7.58	7.32	7.49	7.22	7.32	7.05	7.19	6.89	6.86	7.39%	6.98%	
Empire District Electric Co. (Th)	7.2	291641AS7	1st	12/1/2016	BBB+	4.10	4.29	4.31	4.26	4.05	3.62	3.27	2.98	2.80	2.90	2.70	2.64	3.49%	2.75%	
Entergy Gulf States	6.18	29364LAT9	1st	3/1/2035	BBB+	6.69	6.24	6.38	6.34	6.21	6.22	6.17	6.20	6.17	6.17	6.17	6.18	6.26%	6.17%	
Entergy Gulf States	5.7	29364LAU6	1st	6/1/2015	BBB+	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70%	5.70%	
Florida Pwr	6.75	34110CAL2	Nts	2/1/2028	BBB+	6.17	6.10	6.16	6.13	5.86	6.03	5.78	5.44	4.92	5.05	5.03	4.86	5.63%	4.98%	
Interstate Pwr & Lt	6.45	461070AC8	Sr Deb	10/15/2033	BBB+	5.72	5.65	5.66	5.63	5.34	5.51	5.25	4.86	4.44	4.56	4.44	4.26	5.11%	4.42%	
Interstate Pwr & Lt	6.3	461070AD6	Sr Deb	5/1/2034	BBB+	5.72	5.65	5.66	5.63	5.34	5.51	5.27	4.88	4.46	4.59	4.42	4.26	5.12%	4.42%	
Interstate Pwr & Lt	5.5	461070AE4	Sr Deb	7/15/2025	BBB+	5.72	5.64	5.66	5.63	5.29	5.42	5.05	4.61	4.46	4.64	4.54	4.32	5.08%	4.50%	
MDU Resources Group, Inc.	5.98	552690AF6	Sr(Sec)Nts	12/15/2033	BBB+	7.71	7.63	7.65	7.62	7.34	7.52	6.96	6.78	6.25	6.56	6.14	6.10	7.02%	6.27%	
MidAmerican Funding	6.93	59562HAJ7	Sr Sec Bonds	3/1/2029	BBB+	5.76	5.54	5.81	5.68	5.39	5.56	5.32	5.50	4.64	4.90	5.59	4.81	5.38%	5.10%	
MidAmerican Energy Hldg	5.88	59562VAF4	Sr Nts	10/1/2012	BBB+	1.18	1.27	1.24	1.20	0.02	0.02	0.08	0.50	0.99	1.33	1.82	1.16	0.90%	1.44%	
MidAmerican Energy Hldg	5	59562VAK3	Sr Nts	2/15/2014	BBB+	2.31	2.42	2.49	2.05	1.97	2.07	1.95	0.85	1.10	1.05	1.11	1.42	1.73%	1.19%	
MidAmerican Energy Hldg	6.12	59562VAM9	SrBonds	4/1/2036	BBB+	5.72	5.68	5.70	5.63	5.34	5.54	5.17	5.00	4.76	4.46	4.78	4.76	5.21%	4.67%	
National Grid plc	6.3	636274AC6	Notes	8/1/2016	BBB+	3.34	3.44	3.46	3.42	2.93	3.05	2.67	2.70	3.02	2.98	2.85	2.86	3.06%	2.90%	
Oklahoma Gas & Elec Co	6.65	678858AZ4	Sr Nts	7/15/2027	BBB+	5.72	5.65	5.66	5.63	5.20	5.37	5.05	4.66	4.24	4.29	4.17	3.96	4.97%	4.14%	
Oklahoma Gas & Elec Co	6.5	678858BB6	Sr Nt	7/15/2017	BBB+	3.95	4.14	4.16	4.11	3.62	3.68	3.34	2.85	3.04	2.95	2.93	2.64	3.45%	2.84%	
Oklahoma Gas & Elec Co	6.5	678858BC4	Sr Nt	4/15/2028	BBB+	5.77	5.70	5.71	5.68	5.29	5.47	5.17	4.83	3.31	4.39	4.76	4.61	5.06%	4.59%	
Oklahoma Gas & Elec Co	5.75	678858BF7	Sr Nts	1/15/2036	BBB+	5.77	5.70	5.71	5.68	5.31	5.47	5.17	4.86	4.44	4.46	4.34	4.16	5.09%	4.32%	
Oklahoma Gas & Elec Co	5.15	678858BG5	Sr Nts	1/15/2016	BBB+	3.70	3.88	3.91	3.86	3.54	3.60	3.27	2.55	2.74	2.63	2.59	3.24%	2.62%		
Public Svc No Car	6.99	744516AA3	Sr Deb	1/15/2026	BBB+	6.02	5.85	5.86	5.83	5.47	5.56	5.07	4.46	4.27	4.44	4.17	5.11%	4.32%		
Public Svc No Car	7.45	744516AB1	Sr Deb	12/15/2026	BBB+	6.02	5.85	5.86	5.83	5.56	5.69	5.10	4.56	4.39	4.54	4.44	4.27	5.18%	4.42%	
Sempra Energy	6	816851AF6	Nts	2/1/2013	BBB+	1.83	1.96	2.04	1.95	2.08	2.27	2.37	0.02	0.06	1.32	1.27	1.59	1.56%	1.39%	
Southern California Edison Co.	6.65	824200E85	Nts	4/1/2029	BBB+	5.57	5.45	5.51	5.48	5.20	5.37	5.05	4.68	4.24	4.29	4.20	4.06	4.93%	4.18%	
Tampa Electric Co.	6.875	875127AS1	Nts	6/15/2012	BBB+	1.04	1.19	1.19	1.10	0.57	1.07	1.43	2.40	2.93	3.35	3.84	1.43	1.80%	2.87%	
Tampa Electric Co.	6.375	875127AU6	Nts	8/15/2012	BBB+	1.03	1.18	1.19	1.10	0.02	0.22	0.52	1.38	1.88	2.28	2.72	1.28	2.13%	2.09%	
Tampa Electric Co.	6.65	875127AV4	Nts	5/15/2036	BBB+	5.72	5.65	5.61	5.58	5.20	5.37	5.22	4.93	4.56	4.73	4.51	4.36	5.12%	4.53%	
Tampa Electric Co.	6.15	875127AW2	Sr Nts	5/15/2037	BBB+	5.72	5.55	5.51	5.48	5.43	5.37	5.12	4.93	4.56	4.59	4.39	4.36	5.08%	4.45%	
Tampa Electric Co.	6.1	875127AX0	Fixed Rt	5/15/2018	BBB+	4.03	4.01	3.99	3.87	3.54	3.66	3.34	3.07	2.82	3.07	3.02	2.62	3.42%	2.90%	
Union Electric	5.25	906548BX9	Sr Sec Nts	9/1/2012	BBB+	1.53	1.66	1.74	1.65	0.57	0.89	1.06	1.28	1.74	1.48	1.43	1.46	1.37%	1.46%	
Union Electric	5.5	906548BY7	Sr Sec Nts	3/15/2034	BBB+	6.32	6.09	6.16	6.13	5.61	5.77	5.51	5.03	4.56	4.87	4.40	4.36	5.40%	4.54%	
Union Electric	4.75	906548BZ4	Sr Sec Nts	4/1/2015	BBB+	2.85	2.99	3.06	3.01	2.66	2.73	2.33	2.54	2.66	2.50	2.30	2.24	2.66%	2.35%	
Union Electric	4.65	906548BC6	Sr Sec Nts	10/1/2013	BBB+	1.97	1.65	1.74	1.66	0.97	1.08	1.10	1.12	1.41	1.45	1.42	1.42%	1.43%		
Union Electric	5.5	906548CC4	Sr Sec Nts	5/15/2014	BBB+	2.71	2.92	3.05	2.95	2.61	2.71	2.40	2.33	2.60	2.29	2.21	2.17	2.22%		
Union Electric	5	906548CD2	Sr Sec Nts	2/1/2020	BBB+	4.88	4.76	4.84	4.80	4.22	4.33	4.00	3.34	3.27	3.60	3.26	3.17	4.04%	3.34%	
Union Electric	6.4	906548CE0	Sr Sec Nts	6/15/2017	BBB+	3.90	3.99	3.91	3.81	3.31	3.42	3.07	2.80	2.93	2.90	2.60	2.54	3.27%	2.68%	
Union Electric	6	906548CF7	Sr Sec Nts	4/1/2018	BBB+	4.43	4.26	4.34	4.29	3.98	4.10	3.73	3.20	3.05	3.15	2.81	2.82	3.68%	2.93%	
Union Electric	6.7	906548CG5	Sr Sec Nts	2/1/2019	BBB+	4.33	4.26	4.34	4.29	3.98	4.10	3.73	3.10	3.27	3.21	3.06	3.27	3.75%	3.18%	
Wester Energy, Inc.	6	95709TAAB8	1st Mtg Bd	7/1/2014	BBB+	2.47	2.67	2.79	2.70	2.22	2.34	2.19	2.12	2.37	2.14	2.06	2.02	2.34%	2.07%	
Wester Energy, Inc.	5.15	95709TAB6	1st Mtg Bd	1/1/2017	BBB+	4.05	4.23	4.31	4.26	3.90	3.95	3.37	3.02	3.10	3.30	3.10	3.04	3.64%	3.15%	
Wester Energy, Inc.	5.95	95709TAC4	1st Mtg Bd	1/1/2035	BBB+	6.17	6.10	6.16	6.13	5.86	6.03	5.76	5.27	5.29	5.62	5.20	5.16	5.73%	5.33%	
Wester Energy, Inc.	5.1	95709TAD2	1st	7/15/2020	BBB+	4.33	4.36	4.44	4.34	3.98	4.10	3.76	3.44	3.50	3.75	3.41	3.32	3.89%	3.49%	
Wester Energy, Inc.	5.88	95709TAEO	1st Mtg Bd	7/15/2036	BBB+	6.17	6.10													

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Arizona Public Service	5.8	040555CG7	Nts	6/30/2014	BBB	2.46	2.67	2.64	2.30	1.96	1.72	1.72	1.47	1.75	1.68	2.00	1.43	1.98%	1.70%	
Arizona Public Service	5.5	040555CH5	Nts	9/1/2035	BBB	6.22	5.74	5.85	5.73	5.42	5.51	5.51	5.16	4.85	4.59	4.68	4.46	5.31%	4.58%	
Arizona Public Service	6.88	040555CK8	Nts	8/1/2036	BBB	6.27	5.80	5.91	5.78	5.47	5.56	5.56	5.16	4.85	4.93	4.86	4.71	5.41%	4.83%	
Progress Energy, Inc.	6.5	144141CS5	Nts	7/15/2012	BBB	1.08	1.18	1.23	1.00	0.77	0.62	0.62	0.65	0.69	0.87	0.84	0.95	0.88%	0.89%	
CenterPoint Energy, Inc.	6.85	15189TAG2	Sr Nts'B'	6/1/2015	BBB	3.30	3.49	3.56	3.11	2.64	2.34	2.34	2.06	2.44	2.80	2.60	2.70	2.78%	2.70%	
CenterPoint Energy, Inc.	5.95	15189TAN7	Sr Nts	2/1/2017	BBB	4.20	4.38	4.20	4.15	3.72	3.24	3.24	3.06	3.24	3.40	3.20	3.14	3.60%	3.25%	
Cleco Power LLC	5.375	185508AC2	Nts	5/1/2013	BBB	2.42	2.55	2.59	2.51	2.17	2.03	2.03	1.94	2.06	2.06	2.12	2.24%	2.12%		
Cleco Power LLC	4.95	185508AD0	Nts	7/15/2015	BBB	3.65	3.83	3.86	3.81	3.18	2.89	2.89	2.46	2.59	2.85	2.85	2.54	3.12%	2.75%	
Cleco Power LLC	6.5	185508AE8	Nts	12/1/2035	BBB	6.42	6.34	6.36	6.33	5.87	5.91	5.91	5.31	4.90	5.12	4.98	4.76	5.68%	4.95%	
Cleveland Electric Illuminating	7.88	186108BU9	Sec Nts'D'	11/1/2017	BBB	4.20	4.39	4.46	4.31	3.88	3.49	3.49	2.91	3.09	3.18	3.20	3.04	3.64%	3.14%	
Commonwealth Edison	6.95	202795GX2	Nts	7/15/2018	BBB	4.98	5.21	5.19	5.14	4.46	4.27	4.27	3.84	3.75	4.00	3.84	3.52	4.37%	3.79%	
DTE Energy Co.	6.35	233331AM9	Sr Nts'06B	6/1/2016	BBB	3.75	3.94	3.66	3.46	2.83	2.88	2.88	2.59	2.71	3.04	2.80	2.60	3.54	3.07%	2.65%
El Paso Electric Co.	6	283677AW2	Sr Nts	5/15/2035	BBB	6.32	6.00	5.91	5.88	5.61	5.76	5.51	5.03	4.90	5.22	4.75	4.71	5.47%	4.89%	
Indiana Mich Pwr	6.375	454889AH9	Sr Nts'E'	11/1/2012	BBB	1.93	2.07	2.14	1.45	0.02	0.02	0.02	0.33	0.94	1.33	1.79	1.41	1.12%	1.51%	
Indiana Mich Pwr	5.05	454889AK2	Sr Nts'F'	11/15/2014	BBB	2.96	3.17	3.30	2.65	1.88	2.55	1.83	1.78	2.11	1.83	1.88	1.82	2.31%	1.84%	
Indiana Mich Pwr	5.65	454889AL0	Sr Nts'G'	12/1/2015	BBB	3.25	3.44	3.51	3.21	3.02	2.55	2.19	1.95	2.17	2.24	2.44	2.34	2.69%	2.34%	
Indiana Mich Pwr	6.05	454889AM8	Sr Nts'H'	3/15/2037	BBB	5.82	5.70	5.76	5.78	5.51	5.66	5.32	5.07	4.76	4.66	4.68	4.56	5.27%	4.63%	
Kansas City Power & Light	6.05	485134BH2	Sr Nt Ser A	11/15/2035	BBB	6.17	6.09	6.06	6.03	5.76	5.93	5.56	5.17	5.29	5.07	4.93	4.91	5.58%	4.97%	
Kansas City Power & Light	5.85	485134BJ8	Sr Nt	6/15/2017	BBB	4.20	4.38	4.06	3.86	3.42	3.46	3.22	3.02	3.10	3.15	3.12	2.99	3.50%	3.09%	
Kentucky Power	5.62	491386AL2	Sr Nts'D'	12/1/2032	BBB	6.17	6.09	6.16	6.13	5.86	6.03	5.77	5.32	4.78	4.98	4.83	5.11	5.60%	4.97%	
Nevada Power	6.5	641423BH0	Gen & Ref'l'	4/15/2012	BBB	1.46	1.61	0.99	0.79	1.52	2.06	2.40	2.84	3.67	3.67	1.76	1.71	1.75	2.24%	1.74%
Nevada Power	5.88	641423BK3	Gen & Ref'l'	1/15/2015	BBB	2.70	2.89	2.70	2.66	2.54	2.67	2.29	1.35	1.83	1.76	1.71	1.75	2.24%	1.74%	
Nevada Power	6.75	641423BU1	Gen & Refunding Mtg Nt Ser F	7/1/2037	BBB	5.82	5.73	5.66	5.64	5.34	5.49	5.17	4.77	4.44	4.56	4.54	4.36	5.13%	4.49%	
Northeast Utilities	7.25	664397AE6	Sr Nts'A'	4/1/2012	BBB	1.59	1.75	1.74	1.64	2.40	2.89	3.26	3.72	4.26	1.53	1.41	1.60	2.32%	1.51%	
Ohio Power Co.	5.5	677415CD1	Sr Nts'F'	2/15/2013	BBB	1.67	1.81	1.79	1.60	1.94	2.10	2.18	0.02	0.52	0.82	0.40	1.29	1.35%	0.84%	
Ohio Power Co.	6.6	677415CF6	Sr Nts'G'	2/15/2033	BBB	5.82	5.80	5.76	5.73	5.47	5.61	5.32	5.15	4.51	4.76	4.73	4.51	5.26%	4.67%	
Ohio Power Co.	4.85	677415CG4	Sr Nts'H'	1/15/2014	BBB	2.41	2.52	2.29	2.25	2.12	2.02	1.90	0.78	1.19	0.97	1.10	1.75	1.78%	1.27%	
Ohio Power Co.	6.38	677415CJ8	Sr Nts'I'	7/15/2033	BBB	6.62	6.15	6.21	6.18	6.05	6.22	5.95	5.98	5.98	6.00	6.03	6.02	6.11%	6.02%	
Ohio Power Co.	6	677415CL3	Sr Nts'K'	6/1/2016	BBB	3.40	3.59	3.21	3.26	2.73	2.80	2.49	2.55	2.73	2.41	2.61	2.29	2.84%	2.44%	
PPL Energy Supply	6.4	69352JAC1	Sr Nts'A'	11/1/2011	BBB	0.67	0.73	0.70	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.68%	0.68%	
PPL Energy Supply	5.7	69352JAG2	Reset PutSecs	10/15/2035	BBB	5.03	5.10	5.17	5.11	5.04	5.12	5.03	4.95	5.07	5.10	5.10	5.07	5.07%	5.09%	
PPL Energy Supply	6.2	69352JAH0	Sr Nts	5/15/2016	BBB	3.80	3.99	4.06	3.86	3.44	3.51	3.18	2.93	3.90	3.71	3.71	3.34	3.62%	3.59%	
PPL Energy Supply	6	69352JAK3	Sr Nts	12/15/2036	BBB	6.42	6.34	6.36	6.33	6.00	6.12	5.86	5.56	5.29	5.69	5.54	5.61	5.93%	5.61%	
PPL Energy Supply	6.5	69352JAL1	Sr Nts	5/1/2018	BBB	4.68	4.71	4.54	4.54	4.15	4.34	4.00	3.52	3.71	4.24	3.85	4.02	4.19%	4.04%	
PPL Energy Supply	6.3	69352JAM9	Sr Nts	7/15/2013	BBB	2.07	2.01	2.19	2.10	1.51	1.73	1.79	2.30	2.66	2.80	2.52	1.78	2.12%	2.37%	
PSEG Power LLC	7.75	69362BAF9	Sr Nts	4/15/2011	BBB	0.91	1.47	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	1.19%	1.19%	
PSEG Power LLC	8.62	69362BAJ1	Sr Nts	4/15/2031	BBB	6.27	6.25	6.36	6.33	5.86	6.12	5.88	5.64	5.42	5.12	4.94	4.81	5.75%	4.96%	
PSEG Power LLC	6.95	69362BAM4	Sr Nts	6/1/2012	BBB	1.24	1.14	1.24	1.07	0.91	1.45	1.77	2.67	3.06	3.48	3.99	0.25	1.86%	2.57%	
PSEG Power LLC	5.5	69362BAN2	Sr Nts	12/1/2015	BBB	3.30	3.34	3.41	3.36	3.15	2.73	2.37	2.39	2.68	2.60	2.49	2.87%	2.56%		
PSEG Power LLC	5	69362BAP7	Sr Nts	4/1/2014	BBB	2.31	2.52	2.70	2.60	2.23	2.45	2.30	2.32	2.52	1.44	1.52	1.77	2.22%	1.58%	
Pacific Gas & Electric Co.	4.8	694308GD3	1st	3/1/2014	BBB	1.86	1.97	2.15	1.90	1.68	1.79	1.62	1.69	0.77	0.78	1.05	1.32	1.55%	1.05%	
Pacific Gas & Electric Co.	6.05	694308GE1	1st	3/1/2034	BBB	5.62	5.54	5.69	5.66	5.61	5.86	5.15	5.17	4.88	4.42	4.59	4.36	5.21%	4.46%	
Pepco Holdings, Inc.	6.12	713291AP7	Nts	6/1/2017	BBB	4.45	4.63	4.66	4.61	4.17	4.22	3.88	3.78	4.04	4.05	3.85	3.79	4.18%	3.90%	
Progress Energy, Inc.	7.75	74263EA5E	Sr Nts	3/1/2031	BBB	5.77	5.65	5.71	5.68	5.42	5.62	5.27	5.15	4.76	4.87	4.45	4.46	5.23%	4.59%	
Progress Energy, Inc.	7	74263GAQ	Sr Nts	10/30/2031	BBB	5.77	5.65	5.71	5.68	5.38	5.60	5.25	5.10	4.78	4.74	4.51	4.47	5.22%	4.57%	
Progress Energy, Inc.	6.86	74263AJ4	Sr Nts	4/15/2012	BBB	1.16	1.30	1.04	0.84	1.47	2.05	2.43	3.04	3.59	1.02	0.84	1.01	1.65%	0.96%	
Progress Energy, Inc.	5.62	74263AL9	Sr Nts	1/15/2016	BBB	2.90	3.09	3.11	3.06	2.76	2.85	2.55	1.71	1.87	2.15	1.95	1.94	2.50%	2.01%	
Public Service Co. of Oklahoma	6.15	744533SBH2	Sr Nts'F'	8/1/2016	BBB	3.55	3.74	3.81	3.76	3.24	3.32	2.98	2.73	2.98	3.00	2.80	2.74	3.22%	2.85%	
Public Service Co. of Oklahoma	6.62	744533BJ8	Sr Nts'G'	11/15/2037	BBB	5.87	5.80	5.86	5.83	5.59	5.76	5.36	5.17	4.68	5.17	4.80	4.76	5.39%	4.91%	
Southwestern Elec Power	5.38	845437BE1	Sr Nts	4/15/2015	BBB	3.50	3.64	3.71	3.36	3.00	3.07	2.71	2.51	2.74	2.05	2.07	2.29	2.89%	2.14%	
Southwestern Elec Power	4.9	845437BG6	Sr Nt Ser D	7/1/2015	BBB	3.50	3.54	3.61	3.31	2.89	2.95	2.57	2.34	2.59	2.63	2.68	2.34	2.91%	2.55%	
Southwestern Elec Power	5.55	845437BH4	Sr Nt Ser E	1/15/2017	BBB	4.20	4.33	4.31	4.26	3.93	3.98	3.63	3.05	3.28	3.12	3.10	2.99	3.68%	3.07%	
TECO Energy, Inc.	6.75	872375AP5	Nts	5/1/2015	BBB	3.45	3.64	3.66	3.61	3.33	3.44	3.12	3.04	3.68	3.50	3.04	3.39	3.41%	3.31%	
WPS Resources Corp.	5.375	92931BAB2	Sr Nts	12/1/2012	BBB	1.83	1.96	1.99	1.90	2.59	0.28	0.42	0.62	1.04	1.33	1.62	1.64	1.44%	1.53%	
AmerenEnergy Generating	7.95	92360XAJ6	Sr Nts'F'	6/1/2032	BBB-	8.17	7.84	8.21	8.03	7.97	8.06	8.06	8.17	8.24	8.57	8.25	8.24	8.15%	8.35%	
Black Hills Corp.	6.5	92113AE9	Nts	5/15/2013	BBB	2.62	2.75	2.79	2.70	2.08	1.93	1.93	2.44	2.21	2.31	2.27	2.28	2.36%	2.29%	
Cleveland Electric Illuminating	5.65	186108CD6	Sr Nts	12/																

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Hawaiian Elec Indus	5.25	41987QB88	M-T Nts 'D'	3/7/2013	BBB-	2.15	2.34	2.34	2.37	2.34	2.45	2.50	2.56	0.49	0.67	0.46	1.43	1.84%	0.85%	
Pennsylvania Electric	6.625	708696BM0	Sr Nts 'C'	4/1/2019	BBB-	5.13	5.01	5.19	5.04	4.71	4.83	4.46	3.98	3.81	3.68	3.59	4.12	4.46%	3.80%	
Public Serv. New Mexico	7.5	744499AN4	Sr Unsec Nts 'B'	8/1/2018	BBB-	5.83	5.86	5.89	5.84	5.44	5.73	5.39	5.47	5.29	4.54	4.90	4.62	5.40%	4.69%	
West Penn Power Co.	6.625	955278BF2	Nts	4/15/2012	BBB-												2.02	2.02%		
CMS Energy Corp.	8.5	125896AQ3	Sr Nts	4/15/2011	BB+	1.66	2.22											1.94%		
CMS Energy Corp.	6.3	125896AX8	Sr Nts	2/1/2012	BB+	0.21	2.44	2.05	1.69	1.74	1.60	1.60	1.82	0.74	1.02			1.49%		
CMS Energy Corp.	6.88	125896AZ3	Sr Nts	12/15/2015	BB+	4.60	4.64	4.51	4.51	3.68	3.64	3.64	3.81	4.39	4.65	4.60	4.04	4.23%	4.43%	
CMS Energy Corp.	1.25	125896BB5	Sr Nt Fltg	1/15/2013	BB+	2.10	2.07	1.96	1.97	1.53	1.88	1.88	2.68	2.78	3.04	3.17	2.32	2.28%	2.84%	
FirstEnergy Corp.	7.38	337932AC1	Nts 'C'	11/15/2031	BB+	6.82	6.57	6.62	6.48	5.95	6.15	5.78	5.95	5.44	5.52	5.50	5.46	6.02%	5.49%	
Sierra Pacific Resources	6.75	826428AN4	Sr Nts	8/15/2017	BB+	6.52	6.28	6.38	6.35	6.17	6.25	6.17	6.06	6.53	6.30	6.30	6.30	6.30%	6.30%	
CMS Energy Corp.	6.55	125896BA7	Sr Nts	7/17/2017	BB	5.11	4.83	4.84	4.63	4.03	3.94	3.94	4.20	4.64	4.79	4.90	4.99	4.57%	4.89%	
AES Corp. (The)	7.750	00130HBC8	Sr Nts	3/1/2014	BB-	4.75	4.60	4.60	4.34	4.16	4.72	4.72	6.00	5.62	4.34	4.90	3.86	4.72%	4.37%	
NRG Energy, Inc.	7.25	629377AT9	SrNts	2/1/2014	BB-	6.48	6.46			6.47	6.47	6.47	6.47	6.47	6.47	6.47	6.47	6.47%	6.47%	
NRG Energy, Inc.	7.38	629377AX0	SrNts	1/15/2017	BB-	6.55	6.26	6.53	6.36	6.25	6.39	6.37	6.65	6.61	6.40	6.52	6.48	6.45%	6.45%	
TXU Corp.	6.5	873168AN8	Sr Nts'Q'	11/15/2024	CC	16.72	16.33	16.62	14.39	14.86	15.77	17.82	19.92	20.38	18.82	19.46	17.45	17.38%	18.58%	
TXU Corp.	6.55	873168AQ1	Sr Nts'R'	11/15/2034	CC	15.29	15.06	15.15	13.16	13.33	14.11	16.13	17.91	18.37	16.50	17.49	16.05	15.71%	16.68%	
Dynegy/Hldgs	8.75	26816LAG7	Sr Nts	2/15/2012	D	8.74	8.56	8.42	8.06	8.48	9.30	12.70						8.89%		
Dynegy/Hldgs	8.38	26816LAT9	Sr Nts	5/1/2016	D	14.16	13.83	12.89	12.72	13.33	14.23	17.16	19.66	22.23	19.44	18.99	20.35	16.58%	19.59%	
TXU Corp.	5.55	873168AL2	Sr Nts'P'	11/15/2014	D	19.13	18.50	19.05	12.11	12.01	14.70	17.39	22.93	25.38	23.61	21.61	19.11	18.79%	21.44%	
Allegheny Energy Supply	7.8	017363AD4	Nts	3/15/2011	NR	3.00	3.00											3.00%		
Allegheny Generating	6.88	017364AG5	Deb	9/1/2023	NR	6.95	6.86	6.94	6.92	6.72	6.72	6.72	6.75	6.76	6.76	6.76	6.76	6.80%	6.76%	
Arizona Public Service	6.375	040555CC6	Nts	10/15/2011	NR	1.06	1.10	0.84	0.83	1.02	0.70	0.70	0.86					0.89%		
Progress Energy, Inc.	8.62	144141BP2	1st	9/15/2021	NR	4.68	4.71	4.79	4.74	4.41	4.22	4.22	3.64	3.40	3.65	3.31	3.22	4.08%	3.39%	
Progress Energy, Inc.	5.12	144141CT3	1st	9/15/2013	NR	1.32	1.45	1.54	1.46	1.02	0.93	0.93	0.94	0.96	0.96	0.87	0.87	1.10%	0.90%	
Progress Energy, Inc.	5.7	144141CV8	1st	4/1/2035	NR	5.52	5.45	5.51	5.48	5.22	5.16	5.16	4.61	4.35	4.57	4.25	4.21	4.96%	4.34%	
Progress Energy, Inc.	5.15	144141CW6	1st	4/1/2015	NR	2.50	2.69	2.66	2.41	2.14	1.86	1.86	1.41	1.39	1.50	1.40	1.25	1.92%	1.38%	
Progress Energy, Inc.	5.25	144141CX4	1st	12/15/2015	NR	2.50	2.69	2.71	2.66	2.13	1.86	1.86	1.40	1.38	1.60	1.50	1.44	1.98%	1.51%	
Progress Energy, Inc.	6.3	144141CY2	1st	4/1/2038	NR	5.35	5.34	5.40	5.37	5.09	5.05	5.05	4.46	4.20	4.32	4.00	4.06	4.81%	4.13%	
Central Illinois Pub Serv	6.125	153663BJ7	Sr Nts	12/15/2028	NR	5.99	5.99											5.99%		
Central Illinois Pub Serv	6.625	153663BL2	Sr Nts	6/15/2011	NR	3.29												3.29%		
Central Illinois Pub Serv	6.7	153663BM0	Sr Sec Nts	6/15/2036	NR	6.09	6.09											6.09%		
Commonwealth Edison	4.75	202795AW0	SF Deb	12/1/2011	NR	5.01	5.01	4.90	4.89	4.84	4.81	4.81	9.43	9.54				5.92%		
Commonwealth Edison	5.4	202795HP8	1st Ser 109	12/15/2011	NR	0.77	0.70	0.66	0.49	0.63	0.53	0.53	0.74	0.73				0.64%		
Constellation Energy Group, Inc.	7	210371AH3	Nts	4/1/2012	NR	0.68	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.08%	0.02%	
Consumers Energy Co.	6.875	210518AT3	Sr Nts 'B'	3/1/2018	NR	4.10	4.19	5.02	4.40	4.04	3.84	3.84	3.35	3.06	3.15	3.65	3.54	3.85%	3.45%	
Consumers Energy Co.	5.65	210518CM6	InsurOrltyNts	4/15/2035	NR	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65%		
DTE Energy Co.	7.05	233331AE7	Sr Nts	6/1/2011	NR	0.92	1.25	1.04	0.78									1.00%		
Dominion Resources	7.82	257469AC0	Remkt Nts 'E'	9/15/2014	NR	2.47	2.67	2.84	2.65									1.23%		
Duquesne Light Co.	6.7	266228CR4	1st 'O'	4/15/2012	NR		1.35	1.39	1.89	2.37	2.71	3.27	3.27	3.77			1.49	2.28%	1.49%	
Dynegy/Hldgs	6.875	26816LAD4	Sr Nts	4/1/2011	NR	5.98	4.02											5.00%		
Empire District Electric Co. (The)	7.05	291641AX6	Sr Nts	12/15/2022	NR	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05	7.05%	7.05%		
Entergy Gulf States	4.88	29364LAQ5	1st	11/1/2011	NR	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.00	4.88	4.88			4.79%	4.88%	
Entergy Gulf States	5.6	29364LAS1	1st	12/1/2014	NR	5.60	5.60	5.60	5.60	5.60	5.60	5.60	4.88	5.60	5.60	5.60	5.60	5.54%	5.60%	
Entergy Mississippi	4.65	29364NAM0	1st Mtg	5/1/2011	NR	1.73	2.01	1.99										1.91%		
Entergy Mississippi	5.92	29364NAN8	1st	2/1/2016	NR	5.85	5.97	6.07	6.00	5.88	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.94%	5.93%	
Entergy New Orleans	5.65	29364PAJ2	1st	9/10/2029	NR	6.34	6.28	5.92	5.80									5.64%		
Entergy New Orleans	5.6	29364PAK9	1st	9/1/2024	NR	5.56	5.57	5.57	5.57									5.57%	5.58%	
Exelon Generation	6.95	30161MA89	Sr Nts	6/5/2011	NR	1.92	1.92	1.92	1.92	1.92								1.92%		
FIRSTEnergy Corp.	6.45	337932AB3	Nts 'B'	11/15/2011	NR	1.45	1.63	1.49	1.38									1.49%		
Florida Power Corp.	6.65	341099BZ1	1st	7/15/2011	NR	0.76	0.78	0.59	0.45									0.65%		
IES Utilities	6.75	44949RAD4	Sr Deb 'B'	3/15/2011	NR	3.27	3.27											3.27%		
Kansas City Power & Light	6.5	485134BC3	Sr Nts	11/15/2011	NR	1.80	1.97	1.99	1.89									1.91%		
Mississippi Power Co.	5.4	605417BT0	Sr Nts'G'	7/1/2035	NR	6.02	5.94	6.01	5.98									5.43%	4.68%	
NRG Energy, Inc.	7.38	629377AU6	SrNts	2/1/2016	NR	6.54	6.53	6.51	6.44	6.44	6.39	6.43	6.43	6.43	6.43	6.43	6.43	6.45%	6.43%	
Nevada Power	8.25	641423AZ1	Gen & Ref 'A'	6/1/2011	NR	0.88	1.06	0.61	0.44									0.75%		
NorthWestern Corp.	5.88	668074AM9	Sr Sec Nts	11/1/2014	NR	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10%	5.10%	
Orange & Rockland Utils	7	684065AU9	Deb 'G'	3/1/2029	NR	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57	6.57%	6.57%	
Exelon Corp.	5.95	693304AB3	1st&Ref Mtg	11/1/2011	NR	0.55	0.60	0.58	0.49									0.56%		
Exelon Corp.	4.75	693304AD9	1st&Ref Mtg	10/1/2012	NR	0.98	1.06	1.19	0.95									0.75	0.99%	0.75%
Exelon Corp.	5.9	693304AG2	1st Ref Mtg	5/1/2034	NR	5.67	5.60	5.71	5.68									4.06	5.34%	4.06%
Exelon Corp.	5.95	693304AH0	1st Ref Mtg	10/1/2036	NR	5.44	5.37	5.48	5.45									4.11	5.17%	4.11%
Exelon Corp.	5.7	693304AJ6	1st Ref Mtg	3/15/2037	NR	5.57	5.50	5.61	5.58									4.11	5.27%	4.11%
Pacific Gas & Electric Co.	5.8	694308GJ0	Fixed Rt Sr Nt	3/1/2037	NR	5.62	5.57	5.71	5.67	5.61	5.86	5.42	4.93	4.68	4.66	4.83	4.36	5.24%	4.62%	
Potomac Edison Co.	5.35	737662BP0	1st	11/15/2014																

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Electric Utilities
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Savannah Electric&Power	5.5	804787DJ5	Sr Nts'F'	12/15/2028	NR	5.73	5.72	5.75	5.70	5.64	5.79	5.54	5.49	5.49	5.49	5.49	5.49	5.61%	5.49%
Sierra Pacific Power	6.25	826418BB0	Gen & Ref'H'	4/15/2012	NR		0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02%	0.02%
Sierra Pacific Resources	8.625	826428AH7	Sr Nts	3/15/2014	NR	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47	7.47%	7.47%
Sierra Pacific Resources	7.8	826428AJ3	Sr Nts	6/15/2012	NR	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73%	6.73%
Southern Indiana Gas & El	8.88	843163AP1	1st	6/1/2016	NR													2.58	2.58%
Southern Indiana Gas & El	6.72	843163AX4	Sr Nts	8/1/2029	NR													4.41	4.41%
TECO Energy, Inc.	7.2	872375AC4	Nts	5/1/2011	NR	1.69	2.10	1.75										1.85%	
TECO Energy, Inc.	7	872375AG5	Nts	5/1/2012	NR	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02%	
Tennessee Valley Authority	8.25	880591BL5	Pwr Bonds '92D	4/15/2042	NR	7.15	7.17	7.20	7.25	7.27	7.32	7.37	7.42	7.44	7.49	7.54	7.59	7.35%	7.54%
Tennessee Valley Authority	6.235	880591CF7	Pwr Bonds '95B	7/15/2045	NR	5.61	5.59	5.81	5.61	5.42	5.47	5.44	5.27	4.95	5.12	5.10	5.03	5.37%	5.08%
Tennessee Valley Authority	5.98	880591CK6	Pwr Bonds '96A	4/1/2036	NR	5.07	4.95	4.93	4.83	4.68	4.90	4.64	4.12	3.56	3.88	3.76	3.59	4.41%	3.74%
Tennessee Valley Authority	6.15	880591CP5	Pwr Bonds '98B	1/15/2038	NR	5.00	4.86	4.88	4.81	4.66	4.88	4.66	4.05	3.51	3.85	3.71	3.63	4.38%	3.73%
Tennessee Valley Authority	5.88	880591CS9	Pwr Bonds '97C	4/1/2036	NR	5.01	4.90	4.86	4.81	4.64	4.86	4.59	4.20	3.57	3.88	3.73	3.59	4.39%	3.73%
Tennessee Valley Authority	7.14	880591DL3	PwrBonds '00F	5/23/2012	NR	0.02	0.02	0.02	0.11	0.57	1.19	1.72	2.16	2.67	3.18	3.84		1.41%	3.51%
Union Electric	7.69	906548BT8	Sub Cep Inc Sec'A'	12/15/2036	NR	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45%	7.45%
Wisconsin Energy Corp.	6.5	976657AC0	Sr Nts	4/1/2011	NR	0.63	1.34											0.99%	
Wisconsin Electric Power Com	6.875		Deb	12/1/2095	NR	6.27	6.20	6.22	6.12	5.90	6.03	5.81	5.27	4.86	4.83	4.68	4.86	5.59%	4.79%

Counts of data

410 409 402 400 381 379 379 376 375 371 368 368 387 420 392

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
AAA's	2.48%	1.96%
AA's	5.44%	4.62%
A's	3.60%	3.19%
BBB's	3.73%	3.37%
BB's	4.45%	4.70%
CC's	16.55%	17.63%
D	14.76%	20.52%
NR's	3.77%	4.08%
ALL	3.82%	3.53%
BBB- & Above	3.65%	3.24%
BB- & Above	3.67%	3.28%

"Investment Grade (BBB- & Above)



Montana Department of
REVENUE

2012 Capitalization Rate Study

Gas Pipelines

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study

Industry: Gas Pipelines

2012 Assessment Year

Equity Measures Calculated:

E/P estimates:

All	Median	
4.31%	4.62%	Yahoo
5.08%	5.15%	Value Line
4.69%	4.88%	Average of E/Ps

Inverse of P/E Ratios:

4.15%	4.26%	Yahoo
4.81%	4.90%	Value Line
4.48%	4.58%	Average of Inverse of the P/E
5.76%	6.25%	Inverse of median P/E, Value Line
4.59%	4.73%	Average of all above except median P/E

Mean = 4.82% 5.04%

Median = 4.81% 4.90%

Equity Measure NUOI = **5.05%**

Debt Measure Calculated, Current Yield:

	Annual	4th Qtr	
	6.29%	6.05%	ALL
	5.96%	5.76%	BBB- & Above
	6.12%	5.92%	BB- & Above
Mean =	6.12%	5.91%	
Median =	6.12%	5.92%	

Debt Measure = **6.15%**

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate					
Equity	69.00%	x	5.05%	=	3.48%
Debt	31.00%	x	6.15%	=	1.91%
	100.00%				5.39%
Direct Cap Rate NUOI =					5.50%

Gross Cash Flow / Price:

Mean	Median	
8.66%	8.63%	Value Line

Equity Measure Gross = **9.50%**

Industry Market Capital Structure Gross Cash Flow Rate (GCF)					
Equity	69.00%	x	9.50%	=	6.56%
Debt	31.00%	x	6.15%	=	1.91%
	100.00%				8.46%
Direct Cap Rate GCF =					8.50%

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Study Industry: Gas Pipelines 2012 Assessment Year

Equity Measures Calculated:

	<u>All</u>
Dividend Growth Model	12.00%
Capital Asset Pricing Model	9.31%
Mean =	10.65%
Median =	10.65%

Equity Measure FCF = 9.50%

Debt Measures Calculated, Yield to Maturity:

	<u>ALL DEBT</u>		<u>20 YEAR PLUS DEBT</u>	
	Annual	4th Qtr	Annual	4th Qtr
ALL	4.64%	4.33%	5.78%	5.37%
BBB- & Above	4.20%	3.79%	5.66%	5.18%
BB- & Above	4.52%	4.11%	5.77%	5.36%
Mean =	4.45%	4.08%	5.74%	5.30%
Median =	4.52%	4.11%	5.77%	5.36%

Debt Measure = 5.00%

Yield Cap Rate Free Cash Flow - Gas Pipelines				
Equity	69.00%	x	9.50%	= 6.56%
Debt	31.00%	x	5.00%	= 1.55%
	100.00%			8.11%
Weighted Average Cost of Capital (WACC) =				8.25%

Assumed Growth Rate = Inflation

see appendix for calculation

Growth = 2.05%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Gas Pipelines
2012 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L	M
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common (000) DxE	(VL) Book Value Common (000)	(VL) Book Value Preferred (000)	Mkt. Value Preferred (000) IxL	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Debt (000) KxL
Spectra Energy Partners, LP	SEP	A	89,200	29.938	16.385	2,670,499	1,461,500	0	0	655,800	1.00	655,800
ONEOK Partners LP	OKS	A	203,800	50.592	16.054	10,310,582	3,271,800	0	0	2,581,600	1.00	2,581,600
Energy Transfer	ETP	B++	193,200	44.040	23.648	8,508,528	4,568,800	174,600	174,600	6,404,900	1.00	6,404,900
Natl Fuel Gas	NFG	B++	82,100	56.600	21.267	4,646,860	1,746,000	0	0	1,049,000	1.00	1,049,000
TransCanada P.L.	TRP	B++	696,200	41.270	22.268	28,732,174	15,503,000	1,224,000	1,224,000	17,829,000	1.00	17,829,000
EQT Corp	EQT	B++	149,200	59.778	20.635	8,918,927	3,078,700	0	0	1,943,200	1.00	1,943,200
Boardwalk	BWP	B+	192,600	26.855	16.830	5,172,273	3,241,400	0	0	3,252,300	1.00	3,252,300
Enterprise Products	EPD	B+	843,700	44.092	13.481	37,200,139	11,374,200	0	0	13,281,200	1.00	13,281,200
Kinder Morgan Egy Ptnrs L.P.	KMP	B+	316,100	76.447	22.039	24,164,791	6,966,400	244,300	244,300	10,277,400	1.00	10,277,400
Williams Ptrs.	WPZ	B+	289,800	57.150	17.516	16,562,070	5,076,000	0	0	6,365,000	1.00	6,365,000
El Paso Pipeline	EPB	B	177,200	33.945	8.063	6,015,054	1,428,800	0	0	3,400,300	1.00	3,400,300
ONEOK Inc.	OKE	B+	106,800	77.333	22.927	8,259,200	2,448,600	0	0	3,686,500	1.00	3,686,500
Western Gas Partners LP	WES	A	77,600	36.392	14.086	2,823,993	1,093,100	0	0	474,000	1.00	474,000
Markwest Energy Partners LP	MWE	B+	75,200	50.948	14.235	3,831,315	1,070,500	0	0	1,273,400	1.00	1,273,400
Atlas Energy LP	ATLS	B	27,800	22.808	0.579	634,072	16,100	0	0	565,800	1.00	565,800
Eagle Rock Energy Partners Ltd	EROC	B	83,400	10.195	6.944	850,263	579,100	0	0	530,000	1.00	530,000
Crosstex Energy LP	XTEX	C++	50,500	15.857	16.378	800,762	827,100	146,900	146,900	711,500	1.00	711,500
Chesapeake Midstream Ptners LP	CHKM		69,100	26.687	31.243	1,844,049	2,158,900	0	0	249,100	1.00	249,100
Targa Resources Corp	TRGP		42,300	34.385	3.411	1,454,486	144,300	0	0	1,534,700	1.00	1,534,700

SUMS & AVGs - ALL COMPANIES

173,400,036 66,054,300 1,789,800 1,789,800 76,064,700 76,064,700

SUMS & AVGs - B++ & ABOVE COMPANIES

63,787,570 29,629,800 1,398,600 1,398,600 30,463,500 30,463,500

SUMS & AVGs - PRIMARILY GATHERING

12,238,939 5,889,100 146,900 146,900 5,338,500 5,338,500

MEDIAN VALUE - ALL COMPANIES

5,172,273 2,158,900 209,450 209,450 1,943,200 1,943,200

* All Negative values left out of calculations

Notes/Rational for Changes to Guideline Companies

INDUSTRY MARKET STRUCTURE			
	ALL COMPANIES	PRIMARILY GATHERING	
EQUITY	69.00%	173,400,036	69.00%
DEBT	31.00%	77,854,500	31.00%
TOTAL	100.00%	251,254,536	100.00%
			17,724,339

The Guideline Companies were reviewed and some additional companies were added to better represent the gas companies in Montana, while Devon Energy was removed since it is an integrated company. Plains Pipeline was also removed from the Gas Pipeline Capitalization rate since it is primarily Crude Oil.

The add-ons include:

Atlas Energy LP	ATLS
Chesapeake Midstream Ptners LP	CHKM
Crosstex Energy LP	XTEX
Eagle Rock Energy Partners Ltd	EROC
EQT Corp	EQT
Markwest Energy Partners LP	MWE
Natl Fuel Gas	NFG
ONEOK Inc.	OKE
Targa Resources Corp	TRGP
TransCanada P.L.	TRP
Western Gas Partners LP	WES

MONTANA DEPARTMENT OF REVENUE

**Support for Industry Capital Structure
Industry: Gas Pipelines
2012 Assessment Year**

A	B	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Company	Ticker Symbol	(YAHOO) EPS	(YAHOO) E/P	(VL) EPS	(VL) E/P	(VL) CF/S	(VL) CF/P	(YAHOO) P/E	(YAHOO) Inverse of P/E	(VL) P/E	(VL) Inverse of P/E	(VL) Median P/E	(VL) Inverse of Median P/E	(VL) Beta
		1st 12mo	N/E		P/E		R/E		1/T		1/V		1/X	
Spectra Energy Partners, LP	SEP	1.67	5.58%	1.66	5.54%	2.95	9.85%	18.51	5.40%					0.70
ONEOK Partners LP	OKS	2.64	5.22%	2.91	5.75%			20.90	4.78%			16.00	6.25%	0.85
Energy Transfer	ETP	1.31	2.97%	1.77	4.02%	3.80	8.63%	34.15	2.93%	25.06	3.99%			0.80
Natl Fuel Gas	NFG	3.09	5.46%	2.86	5.05%	5.85	10.34%	18.34	5.45%	16.07	6.22%	14.00	7.14%	1.05
TransCanada P.L.	TRP	1.97	4.77%	2.25	5.45%	4.15	10.06%	21.45	4.66%	18.71	5.34%	16.00	6.25%	0.90
EQT Corp	EQT	1.94	3.25%	2.17	3.63%	4.25	7.11%	29.82	3.35%	23.29	4.29%	20.00	5.00%	1.20
Boardwalk	BWP	1.07	3.98%	1.41	5.25%	2.40	8.94%	25.26	3.96%	19.51	5.13%			0.85
Enterprise Products	EPD	3.09	7.01%	2.10	4.76%	3.35	7.60%	14.76	6.77%	21.40	4.67%	24.00	4.17%	0.85
Kinder Morgan Egy Ptnrs L.P.	KMP	0.14	0.18%	1.65	2.16%	4.55	5.95%	580.82	0.17%	43.99	2.27%	23.00	4.35%	0.75
Williams Ptrs.	WPZ	4.42	7.73%	3.55	6.21%	5.70	9.97%	13.42	7.45%	16.97	5.89%			1.05
El Paso Pipeline	EPB	2.38	7.01%	2.15	6.33%	2.90	8.54%	14.12	7.08%	15.68	6.38%			0.75
ONEOK Inc.	OKE	3.04	3.93%	3.25	4.20%	6.40	8.28%	27.55	3.63%	25.69	3.89%	14.00	7.14%	1.00
Western Gas Partners LP	WES	1.68	4.62%	1.66	4.56%			23.46	4.26%					0.80
Markwest Energy Partners LP	MWE	1.05	2.06%	2.74	5.38%			52.15	1.92%					1.15
Atlas Energy LP	ATLS	(0.28)	(1.23%)	1.62	7.10%			(87.68)	(1.14%)					1.90
Eagle Rock Energy Partners Ltd	EROC	0.49	4.81%	0.68	6.67%			22.62	4.42%					1.05
Crosstex Energy LP	XTEX	(0.37)	(2.33%)	(0.38)	(2.40%)			(43.08)	(2.32%)					1.70
Chesapeake Midstream Ptners LP	CHKM	0.92	3.45%	1.34	5.02%			30.07	3.33%					
Targa Resources Corp	TRGP	0.40	1.16%	1.49	4.33%			94.36	1.06%					
SUMS & AVGS - ALL COMPANIES			4.31%		5.08%			8.66%		4.15%		4.81%		5.76% 1.02
SUMS & AVGS - B++ & ABOVE COMPANIES			4.54%		4.91%			9.20%		4.43%		4.96%		6.16% 0.92
SUMS & AVGS - PRIMARILY GATHERING			3.22%		5.51%					3.00%				1.32
MEDIAN VALUE - ALL COMPANIES			4.62%		5.15%			8.63%		4.26%		4.90%		6.25% 0.90

* All Negative values left out of calculations

B++ & ABOVE COMPANIES	
67.00%	63,787,570
33.00%	31,862,100

Notes/Rational for Changes to Guideline Companies

100.00% 95,649,670

Industry Beta = 1.05

The Guideline Companies were reviewed and some Plains Pipeline was also removed from the Gas Pipe

The additions include:

Atlas Energy LP	ATLS
Chesapeake Midstream Ptners LP	CHKM
Crosstex Energy LP	XTEX
Eagle Rock Energy Partners Ltd	EROC
EQT Corp	EQT
Markwest Energy Partners LP	MWE
Natl Fuel Gas	NFG
ONEOK Inc.	OKE
Targa Resources Corp	TRGP
TransCanada P.L.	TRP
Western Gas Partners LP	WES

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model
Industry: Gas Pipelines
2012 Assessment Year

$$K_E = R_F + \beta (R_M - R_F)$$

Gas Pipelines

K_E = Cost of Equity	9.31%
R_F = Risk Free Rate	2.89%
β = Beta	1.05
R_M = Market Rate of Return	9.00%
R_P = Equity Risk Premium ($R_M - R_F$)	6.11%

R_m = Investor's Market Rate of Return

Ibbotson, SBBI, Large Company, Average Annual Return, *Arithmetic Average, Ex-Post
Ibbotson, SBBI, Large Company, Average Annual Return, *Geometric Average, Ex-Post
3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante

$R_M=$	11.80%
$R_M=$	9.80%
$R_M=$	8.50%
Mean =	10.03%
Median =	9.80%
$R_M=$	9.00%

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2011-31 Table 2 December 2011

Rev Rule 2011-31 Table 2

Annual Rates	Short Term - AFR	$R_f =$	0.45%
	Mid Term - AFR	$R_f =$	1.69%
	Long Term - AFR	$R_f =$	3.55%

The ValueLine Investment Survey

U.S. Treasury Securities January 6, 2012

3 Month	$R_f =$	0.01%
6 Month	$R_f =$	0.05%
1 Year	$R_f =$	0.10%

Federal Reserve Statistical Release

Treasury constant Maturities, 2011

Market yield on U.S. Treasury securities, Annual Averages

3-month constant maturity, quoted on investment basis	$R_f =$	0.02%
6-month constant maturity, quoted on investment basis	$R_f =$	0.06%
1-year constant maturity, quoted on investment basis	$R_f =$	0.12%

U.S. Treasury Securities Long-Term December 30, 2011

20 year constant maturity	$R_f = 2.57\%$	Mean =	0.67%
30 year constant maturity	$R_f = 2.89\%$	Median =	0.10%
		Weighted Mean =	0.86%

$R_f =$ 2.89%

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model

Industry: Gas Pipelines

2012 Assessment Year

$$K_E = D_1 / P_0 + G_A$$

KE= Cost of Equity

D1= Expected Dividends

Po= Current Price Per Share

G= Sustainable Growth

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G ₁)	Ke 1 Year
Boardwalk	BWP	26.86	2.14	7.97%	5.00%	12.97%
Enterprise Products	EPD	44.09	2.53	5.74%	8.00%	13.74%
Energy Transfer	ETP	44.04	3.68	8.36%	3.00%	11.36%
El Paso Pipeline	EPB	33.95	2.10	6.19%	12.00%	18.19%
EQT Corp	EQT	59.78	0.88	1.47%	2.00%	3.47%
Kinder Morgan Egy Ptnrs L.P.	KMP	76.45	4.98	6.51%	6.00%	12.51%
Natl Fuel Gas	NFG	56.60	1.46	2.58%	5.50%	8.08%
ONEOK Inc.	OKE	77.33	2.40	3.10%	10.00%	13.10%
ONEOK Partners LP	OKS	50.59				
Spectra Energy Partners, LP	SEP	29.94	1.14	3.81%	5.50%	9.31%
TransCanada P.L.	TRP	41.27	1.68	4.07%	4.00%	8.07%
Williams Ptrs.	WPZ	57.15	3.10	5.42%	8.50%	13.92%
Atlas Energy LP	ATLS	22.81				
Chesapeake Midstream Ptners LP	CHKM	26.69				
Eagle Rock Energy Partners Ltd	EROC	10.20				
Markwest Energy Partners LP	MWE	50.95				
Targa Resources Corp	TRGP	34.39				
Western Gas Partners LP	WES	36.39				
Crostex Energy LP	XTEX	15.86				

Weighted Mean = 11.98%

Mean = 11.34%

Median = 12.51%

Cost of Equity, (K_E) = **12.00%**

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Gas Pipelines
2012 Assessment Year

Ticker	Company		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P- EPS 1st 12 mo
ATLS	Atlas Energy LP	high low	\$15.25 \$13.11	\$18.68 \$13.51	\$23.24 \$16.13	\$27.36 \$20.98	\$27.04 \$21.65	\$24.81 \$20.41	\$25.72 \$21.60	\$25.48 \$17.89	\$21.20 \$18.46	\$25.00 \$15.82	\$24.43 \$22.50	\$25.59 \$23.51	\$22.81	\$21.13	(87.68) (0.28)
BWP	Boardwalk	high low	\$32.52 \$31.01	\$33.47 \$32.00	\$33.50 \$31.18	\$33.47 \$31.66	\$32.83 \$28.02	\$29.05 \$27.01	\$29.32 \$28.05	\$29.11 \$23.54	\$26.60 \$24.40	\$29.12 \$23.82	\$28.75 \$25.38	\$28.21 \$25.85	\$26.86	\$29.08	25.26 1.07
CHK	Chesapeake Energy	high low	\$29.73 \$25.93	\$35.95 \$29.18	\$35.93 \$30.76	\$34.70 \$31.30	\$33.90 \$28.75	\$31.40 \$27.28	\$35.07 \$29.24	\$35.75 \$26.97	\$33.87 \$25.54	\$29.87 \$22.52	\$29.85 \$22.41	\$26.18 \$22.00	\$25.47	\$29.75	12.10 1.99
CHKM	Chesapeake Midstream Ptn	high low	\$29.31 \$26.51	\$28.86 \$24.93	\$29.17 \$25.75	\$29.06 \$27.13	\$27.99 \$25.56	\$28.98 \$25.52	\$28.90 \$27.31	\$28.08 \$23.93	\$28.83 \$25.88	\$27.89 \$25.77	\$26.64 \$24.49	\$29.21 \$26.12	\$26.89	\$27.16	30.07 0.92
DVN	Devon Energy	high low	\$89.38 \$76.96	\$91.50 \$85.30	\$93.56 \$84.37	\$92.89 \$85.14	\$91.61 \$80.46	\$84.28 \$75.50	\$84.52 \$77.49	\$80.25 \$61.18	\$68.51 \$55.14	\$68.25 \$50.74	\$69.55 \$58.56	\$67.89 \$58.85	\$62.31	\$76.32	5.62 11.27
EEP	Enbridge Energy Partners L	high low	\$63.99 \$60.50	\$67.09 \$61.57	\$67.71 \$60.64	\$66.85 \$33.01	\$34.06 \$29.12	\$30.91 \$28.50	\$30.24 \$28.61	\$30.10 \$25.03	\$29.80 \$26.81	\$30.66 \$24.66	\$31.40 \$29.00	\$33.22 \$30.20	\$29.86	\$39.73	31.40 1.01
ENB.TO	Enbridge Inc.	high low	\$58.37 \$54.09	\$59.03 \$56.71	\$60.00 \$56.30	\$62.44 \$58.75	\$62.98 \$31.10	\$32.74 \$29.95	\$31.97 \$30.51	\$32.50 \$28.27	\$33.71 \$30.76	\$35.50 \$31.52	\$36.89 \$34.07	\$38.17 \$34.72	\$35.15	\$42.54	28.25 1.29
EOG	EOG Resources	high low	\$106.58 \$90.84	\$115.17 \$102.34	\$121.44 \$102.00	\$119.82 \$107.84	\$113.80 \$101.84	\$112.04 \$96.62	\$107.88 \$96.40	\$104.32 \$85.58	\$94.16 \$69.55	\$95.26 \$66.81	\$104.47 \$83.88	\$106.20 \$93.01	\$91.61	\$99.91	25.54 3.90
EPB	EI Paso Pipeline	high low	\$35.16 \$32.98	\$37.92 \$34.80	\$38.00 \$34.08	\$37.56 \$35.58	\$37.06 \$33.37	\$34.75 \$32.34	\$37.10 \$34.50	\$37.00 \$31.36	\$38.36 \$34.92	\$38.09 \$32.88	\$33.67 \$31.81	\$35.21 \$32.01	\$33.95	\$35.02	14.12 2.38
EPD	Enterprise Products	high low	\$43.84 \$41.41	\$44.35 \$42.32	\$43.99 \$38.00	\$43.95 \$41.94	\$43.26 \$38.67	\$43.33 \$40.00	\$43.95 \$40.75	\$43.45 \$36.36	\$43.24 \$39.77	\$45.54 \$38.01	\$46.11 \$43.67	\$46.70 \$44.52	\$44.09	\$42.30	14.76 3.09
EQT	EQT Corp	high low	\$48.28 \$44.60	\$49.33 \$46.41	\$49.99 \$43.18	\$52.65 \$45.68	\$54.25 \$48.92	\$54.22 \$48.60	\$64.82 \$51.89	\$65.17 \$47.86	\$65.97 \$53.30	\$73.10 \$49.54	\$65.05 \$55.27	\$62.89 \$52.82	\$59.78	\$53.90	29.82 1.94
EROC	Eagle Rock Energy Partners	high low	\$9.44 \$8.61	\$9.83 \$8.85	\$10.35 \$9.12	\$13.00 \$10.00	\$12.59 \$10.10	\$11.70 \$10.28	\$11.48 \$10.52	\$11.47 \$8.50	\$10.75 \$9.56	\$10.30 \$8.50	\$10.56 \$9.64	\$11.73 \$10.44	\$10.20	\$10.31	22.62 0.49
ETP	Energy Transfer	high low	\$54.20 \$51.03	\$54.95 \$52.85	\$55.50 \$50.31	\$55.20 \$51.55	\$54.71 \$46.32	\$49.33 \$44.75	\$49.50 \$45.66	\$48.36 \$40.25	\$45.05 \$41.00	\$47.69 \$38.08	\$46.25 \$42.75	\$45.97 \$43.50	\$44.04	\$48.12	34.15 1.31
KMP	Kinder Morgan Egy Ptnrs L	high low	\$73.08 \$69.66	\$73.87 \$70.96	\$74.51 \$70.24	\$78.00 \$72.96	\$77.61 \$70.41	\$74.95 \$69.50	\$74.00 \$69.54	\$72.03 \$63.42	\$72.06 \$67.08	\$78.00 \$65.00	\$79.34 \$73.71	\$84.95 \$77.68	\$76.45	\$73.02	580.82 0.14
MWE	Markwest Energy Partners L	high low	\$45.14 \$40.80	\$44.90 \$41.91	\$48.50 \$41.93	\$51.70 \$48.18	\$51.32 \$42.80	\$48.69 \$44.37	\$50.06 \$44.64	\$48.51 \$39.00	\$49.70 \$44.51	\$50.44 \$42.18	\$54.93 \$48.62	\$56.82 \$52.70	\$50.95	\$47.18	52.15 1.05
NFG	Natl Fuel Gas	high low	\$70.87 \$65.91	\$73.16 \$68.02	\$74.00 \$65.80	\$75.75 \$69.25	\$74.76 \$67.16	\$73.35 \$66.39	\$75.98 \$69.45	\$73.75 \$53.10	\$63.23 \$48.67	\$64.11 \$44.51	\$64.19 \$53.43	\$60.14 \$53.22	\$56.60	\$65.34	18.34 3.09
NFX	Newfield Exploration Co	high low	\$73.29 \$67.17	\$76.55 \$65.72	\$77.93 \$67.55	\$77.32 \$68.48	\$75.52 \$64.57	\$75.25 \$62.10	\$73.30 \$66.67	\$69.04 \$44.69	\$52.10 \$39.16	\$43.80 \$34.42	\$46.20 \$38.00	\$47.40 \$35.79	\$40.90	\$60.08	11.36 3.66
NGT	Eastern AmerNatlGasTr'SP	high low	\$23.50 \$23.00	\$24.34 \$23.15	\$23.86 \$22.75	\$24.00 \$22.85	\$24.00 \$23.15	\$23.50 \$22.92	\$23.59 \$22.72	\$23.53 \$22.69	\$23.20 \$22.70	\$23.99 \$22.46	\$23.99 \$23.04	\$23.60 \$22.99	\$23.35	\$23.31	25.32 0.92

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Gas Pipelines
2012 Assessment Year

Ticker	Company		Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P-E EPS 1st 12 mo		
OKE	ONEOK Inc.	high low	\$59.50 \$54.53	\$64.99 \$58.48	\$67.00 \$61.60	\$69.99 \$63.43	\$71.13 \$66.37	\$74.66 \$68.10	\$76.27 \$71.51	\$73.70 \$58.61	\$72.11 \$63.26	\$77.28 \$62.43	\$83.67 \$73.13	\$87.18 \$80.31	\$77.33	\$69.14	27.55	3.04	
OKS	ONEOK Partners LP	high low	NO DATA	\$46.73 \$45.50	\$51.00 \$43.05	\$51.35 \$47.78	\$59.87 \$50.50	\$50.59	\$49.47	20.90	2.64								
SE	Spectra Energy Corp.	high low	\$26.30 \$24.44	\$26.75 \$25.51	\$27.50 \$25.16	\$29.15 \$26.71	\$29.24 \$26.65	\$27.58 \$26.17	\$28.00 \$26.62	\$27.39 \$22.80	\$26.30 \$24.08	\$29.75 \$23.17	\$29.83 \$27.53	\$31.33 \$28.85	\$28.41	\$26.95	16.09	1.87	
SEP	Spectra Energy Partners, L.P.	high low	\$33.37 \$32.01	\$33.50 \$32.45	\$33.07 \$30.73	\$34.93 \$32.20	\$34.57 \$31.01	\$32.39 \$29.64	\$32.18 \$28.24	\$30.09 \$25.53	\$29.58 \$27.70	\$31.47 \$26.35	\$31.01 \$28.98	\$32.00 \$29.82	\$29.94	\$30.95	18.51	1.67	
TRGP	Targa Resources Corp	high low	\$31.71 \$26.51	\$32.95 \$29.25	\$36.70 \$30.80	\$36.73 \$31.68	\$35.47 \$31.52	\$34.97 \$29.44	\$34.90 \$32.10	\$34.91 \$26.01	\$32.54 \$29.21	\$36.77 \$26.76	\$34.95 \$32.34	\$41.12 \$34.37	\$34.39	\$32.65	94.36	0.40	
TRP	TransCanada P.L.	high low	\$38.61 \$36.12	\$40.32 \$36.76	\$40.76 \$37.88	\$43.02 \$40.37	\$44.97 \$42.10	\$45.09 \$41.76	\$44.08 \$40.66	\$43.20 \$37.29	\$43.79 \$39.08	\$44.38 \$37.58	\$42.54 \$38.62	\$43.95 \$40.55	\$41.27	\$40.98	21.45	1.97	
WES	Western Gas Partners LP	high low	\$33.21 \$29.96	\$36.40 \$32.56	\$35.50 \$33.09	\$37.48 \$34.17	\$37.06 \$33.91	\$36.10 \$33.83	\$36.65 \$33.96	\$36.42 \$30.75	\$37.43 \$33.56	\$36.06 \$31.40	\$37.99 \$34.08	\$41.35 \$37.47	\$36.39	\$35.02	23.46	1.68	
WMB	Williams Cos	high low	\$27.17 \$24.26	\$30.95 \$26.73	\$31.77 \$28.70	\$33.33 \$29.86	\$33.47 \$29.39	\$31.57 \$27.92	\$33.16 \$28.34	\$32.11 \$23.46	\$28.26 \$24.27	\$31.40 \$21.90	\$32.50 \$29.02	\$33.11 \$30.36	\$29.72	\$29.29	19.00	1.67	
WPZ	Williams Ptrs.	high low	\$47.55 \$44.81	\$51.95 \$46.79	\$52.00 \$48.00	\$56.61 \$51.80	\$56.38 \$48.52	\$54.76 \$48.25	\$56.07 \$53.73	\$56.61 \$45.39	\$57.32 \$51.45	\$60.09 \$49.11	\$59.28 \$55.75	\$61.22 \$57.45	\$57.15	\$52.95	13.42	4.42	
XTEX	CrossTex Energy LP	high low	\$15.35 \$14.10	\$17.48 \$15.11	\$17.20 \$15.60	\$19.97 \$15.99	\$19.97 \$16.57	\$18.67 \$16.61	\$18.38 \$16.79	\$17.72 \$13.23	\$17.82 \$15.31	\$17.80 \$14.51	\$16.89 \$14.06	\$16.62 \$15.26	\$15.86	\$16.54	(43.08)	(0.37)	

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
XTO Energy Inc.	7.5	98385XA44	Sr Nts	04/15/2012	AAA							7.12	7.16	7.20	7.24	7.28	7.31	7.35	7.24%	7.31%
XTO Energy Inc.	6.25	98385XAC0	Sr Nts	04/15/2013	AAA							5.71	5.72	5.74	5.77	5.79	5.82	5.84	5.77%	5.82%
XTO Energy Inc.	4.9	98385XA8D	Sr Nts	02/01/2014	AAA							4.47	4.46	4.46	4.48	4.49	4.50	4.51	4.48%	4.50%
XTO Energy Inc.	5.3	98385XAG1	Sr Nts	06/30/2015	AAA							4.65	4.60	4.57	4.60	4.63	4.63	4.62	4.61%	4.63%
XTO Energy Inc.	5.65	98385XA98	Sr Nts	04/01/2016	AAA							4.87	4.80	4.76	4.77	4.80	4.76	4.75	4.79%	4.77%
XTO Energy Inc.	6.1	98385XA5J	Sr Nts	04/01/2036	AAA							5.26	5.08	4.78	4.44	4.56	4.47	4.35	4.71%	4.46%
XTO Energy Inc.	5.9	98385XA92	Sr Nts	08/01/2012	AAA							5.59	5.61	5.64	5.66	5.68	5.71	5.73	5.66%	5.71%
XTO Energy Inc.	6.25	98385XAL0	Sr Nts	08/01/2017	AAA							5.16	5.07	5.07	5.08	5.11	5.11	5.09	5.10%	5.10%
XTO Energy Inc.	6.75	98385XAM8	Sr Nts	08/01/2037	AAA							5.22	5.07	4.77	4.31	4.43	4.52	4.37	4.67%	4.44%
XTO Energy Inc.	4.62	98385XAN6	Sr Nts	08/15/2013	AAA							4.31	4.31	4.32	4.34	4.35	4.37	4.37	4.34%	4.36%
XTO Energy Inc.	5.5	98385XAP1	Sr Nts	06/15/2018	AAA							4.78	4.68	4.52	4.50	4.54	4.53	4.48	4.58%	4.52%
XTO Energy Inc.	6.38	98385XAQ9	Sr Nts	08/15/2038	AAA							5.28	4.99	4.61	4.28	4.58	4.46	4.34	4.65%	4.46%
Texaco Capital	9.75	881685AN1	GtdDeb	03/15/2020	AA	7.42	7.35	7.37	7.36	7.05	7.12	6.74	6.64	6.68	6.74	6.79	6.72	7.00%	6.75%	
Texaco Capital	8.875	881685AV3	GtdDeb	09/01/2021	AA	6.80	6.72	6.75	6.73	6.58	6.64	6.18	6.06	6.10	6.16	6.22	6.14	6.42%	6.17%	
Texaco Capital	8.625	881685AX9	GtdDeb	11/15/2031	AA	6.67	6.47	6.49	6.47	6.28	6.40	5.89	5.73	5.53	5.30	5.34	5.23	5.98%	5.29%	
Texaco Capital	8.625	881685AY7	GtdDeb	04/01/2032	AA	6.67	6.46	6.48	6.46	6.27	6.39	5.87	5.71	5.51	5.28	5.32	5.21	5.97%	5.27%	
Texaco Capital	8	881685BB6	GtdDeb	08/01/2032	AA	6.54	6.33	6.35	6.33	6.14	6.25	5.74	5.59	5.38	5.47	5.51	5.39	5.92%	5.46%	
Texaco Capital	7.5	881685BD2	GtdDeb	03/01/2043	AA	6.91	6.84	6.88	6.85	6.81	6.84	6.81	6.85	6.91	6.92	6.96	6.97	6.88%	6.95%	
Northwest Natural Gas	8.26	66765RAT3	Sec M-T Nts B	09/21/2014	A+															6.94%
Northwest Natural Gas	7	66765RAY2	Sec M-T Nts B	08/01/2017	A+	5.94	5.98	5.99	5.97	5.83	5.87	5.77	5.62	5.58	5.60	5.60	5.58	5.78%	5.59%	
Northwest Natural Gas	7.63	66765RBF2	Sec M-T Nts B	12/09/2019	A+	6.35	6.37	6.39	6.38	6.25	6.30	6.17	5.90	5.58	5.82	5.79	5.73	6.09%	5.78%	
Atlantic Richfield	9.125	048825AV5	Deb	03/01/2011	A	9.06	9.13												9.10%	
Atlantic Richfield	9	048825AW3	Deb	04/01/2021	A	7.28	7.30	7.32	7.06	7.06	6.97	6.97	6.79	6.67	6.81	6.77	6.90	6.99%	6.83%	
Atlantic Richfield	9	048825AY9	Deb	05/01/2031	A	7.41	7.35	7.36	7.16	6.96	6.92	6.92	6.92	6.56	6.73	6.63	6.51	6.95%	6.62%	
Atlantic Richfield	9.125	048825AZ6	Deb	08/01/2031	A	7.39	7.33	7.35	7.14	6.94	6.90	6.90	6.89	6.53	6.20	6.61	6.48	6.89%	6.43%	
Atlantic Richfield	8.25	048825BA0	Deb	02/01/2022	A	6.70	6.72	6.74	6.60	6.45	6.36	6.36	6.18	6.06	6.20	6.16	6.07	6.38%	6.14%	
Atlantic Richfield	8.75	048825BB8	Deb	03/01/2032	A	7.34	7.09	7.11	6.90	6.71	6.67	6.67	6.52	6.16	6.33	6.24	6.11	6.65%	6.23%	
Burlington Resources Inc.	9.125	122014AE3	Deb	10/01/2021	A	6.63	6.68	6.70	6.69	6.56	6.52	6.52	6.21	6.13	6.21	6.25	6.27	6.45%	6.24%	
Burlington Resources Inc.	8.2	122014AH6	Deb	03/15/2025	A	6.54	6.59	6.63	6.61	6.44	6.37	6.37	6.12	6.02	6.01	6.31	6.20	6.35%	6.17%	
Burlington Resources Inc.	6.875	122014AJ2	Deb	02/15/2026	A	6.06	6.21	6.25	6.23	6.06	5.85	5.85	5.60	5.49	5.71	5.77	5.66	5.90%	5.71%	
Burlington Resources Fin.	7.375	122014AL7	Deb	03/01/2029	A	6.27	6.25	6.29	6.27	6.12	6.13	6.13	5.86	5.63	5.67	5.56	5.97%	5.62%		
Burlington Resources Fin.	7.2	12201PAB2	Gtd Nt	8/15/2031	A	5.98	5.93	5.95	5.90	5.78	5.79	5.79	5.52	5.24	5.31	5.38	5.36	5.66%	5.35%	
Conoco Inc.	6.95	208251AE8	Nts	04/15/2029	A	5.72	5.76	5.82	5.80	5.65	5.61	5.61	5.43	5.15	5.10	5.25	5.09	5.50%	5.15%	
ConocoPhillips	4.75	20825CAE4	Nts	10/15/2012	A	4.44	4.46	4.48	4.48	4.50	4.50	4.50	4.54	4.56	4.57	4.59	4.61	4.52%	4.59%	
ConocoPhillips	5.9	20825CAF1	Nts	10/15/2032	A	5.49	5.43	5.48	5.49	5.32	5.33	5.33	5.02	4.80	4.91	4.84	4.78	5.19%	4.84%	
Conoco Funding	7.25	20825UAC8	Sr Nt	10/15/2031	A	5.88	5.90	5.92	5.92	5.75	5.76	5.76	5.51	5.23	5.20	5.33	5.34	5.63%	5.29%	
Louisiana Land/Exp	7.625	546268AF0	Deb	04/15/2013	A	6.80	6.85	6.88	6.89	6.91	6.86	6.88	6.93	6.99	6.96	7.01	7.04	6.92%	7.00%	
Louisiana Land/Exp	7.65	546268AG8	Deb	12/01/2023	A	6.03	6.08	6.48	6.46	6.06	6.15	5.96	5.78	5.75	5.71	5.74	5.65	5.99%	5.70%	
Michigan Consol Gas	8.25	594457BD4	1st	05/01/2014	A	7.04	7.11	7.16	7.16	7.12	7.16	7.14	7.12	7.17	7.19	7.22	7.24	7.15%	7.22%	
Michigan Consol Gas	7.06	594457BH5	Sec M-T Nts 'B'	05/01/2012	A	6.63	6.66	6.70	6.71	6.74	6.77	6.79	6.82	6.85	6.88	6.91	6.93	6.78%	6.91%	
Michigan Consol Gas	5.7	594457BT9	Sr Nts	03/15/2033	A	5.78	5.66	5.71	5.68	5.50	5.61	5.43	5.17	4.77	4.85	4.90	4.78	4.84%	4.84%	
Michigan Consol Gas	5	594457BU6	Sr Nts'E'	10/01/2019	A	4.90	4.80	4.82	4.81	4.67	4.71	4.60	4.47	4.42	4.45	4.43	4.38	4.62%	4.42%	
Northern Illinois Gas	6.58	665228BQ4	1st	02/15/2026	A	6.22	6.17	6.19	6.17	6.01	6.11	5.96	5.66	5.36	5.47	5.39	5.29	5.83%	5.38%	
Northern Illinois Gas	7.2	665228BV3	1st	05/15/2016	A	6.02	6.07	6.09	6.07	5.98	6.00	5.92	5.86	5.89	5.91	5.91	5.90	5.97%	5.91%	
Northwest Natural Gas	9.05	66765RAA4	Sec M-T Nts A	08/13/2021	A	6.74	6.77	6.79	6.78	6.62	6.69	6.53	6.29	6.10	6.18	6.15	6.07	6.48%	6.13%	
Occidental Petroleum Corp.	9.25	674599BE4	Sr Deb	08/01/2019	A	6.86	6.89	6.89	6.89	6.76	6.83	6.69	6.52	6.46	6.65	6.71	6.76%			
Occidental Petroleum Corp.	7.2	674599BT6	Sr Deb	04/01/2022	A	6.35	6.28	6.28	6.26	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.74	5.57%		
Occidental Petroleum Corp.	8.45	674599BT1	Sr Nts	02/15/2029	A	6.78	6.73	6.73	6.70	6.55	6.65	6.49	6.20	5.88	6.08	5.83	5.81	6.37%	5.91%	
Occidental Petro Corp Med Term	8.75	67461FE05	N Tranche # Tr 00	1/15/2023	A	7.14	7.16	7.19	7.17	6.99	7.06	6.87	6.63	6.54	6.62	6.58	6.49	6.87%	6.56%	
Occidental Petro	8.75	67461FED5	Sr Nts	01/15/2023	A	7.14	7.16	7.19	7.17	6.99	7.06	6.87	6.63	6.54	6.62	6.58	6.49	6.87%	6.56%	
Phillips Petroleum	6.65	718507BH8	Deb	07/15/2018	A	5.57	5.59	5.66	5.64	5.50	5.55	5.45	5.41	5.40	5.40	5.42	5.33	5.49%	5.38%	
Phillips Petroleum	7	718507BK1	Deb	03/30/2029	A	5.88	5.86	5.89	5.88	5.73	5.85	5.73	5.53	5.26	5.19	5.45	5.34	5.63%	5.33%	
Piedmont Natural Gas Co., Inc.	5	720186AD7	Nts'E'	12/19/2013	A	4.67	4.70	4.71	4.71	4.69	4.67	4.63	4.64	4.66	4.66	4.67	4.68	4.67%		
Piedmont Natural Gas Co., Inc.	6	720186AE5	Nts'E'	12/19/2033	A	6.09	6.03	6.05	6.03	5.83	5.95	5.55	5.21	4.86	5.28	4.99	4.97	5.57%	5.08%	
Piedmont Natural Gas	7.95	72018QAG6	M-T Nts'C'	09/14/2029	A	6.73	6.67	6.68	6.66	6.47	6.58	6.29	5.98	5.65	5.80	5.72	5.61	6.24%	5.71%	
Western Atlas Inc	8.55	957674AD6	Deb	06/15/2024	A	6.40	6.42	6.46	6.44	6.26	6.35	6.17	5.93	5.90	5.82	6.02	5.83	6.17%	5.89%	
ANR Pipeline	7.38	001814AQ5	Deb	02/15/2024	A-	6.21	6.23	6.14	6.04	5.91	5.98	5.98	5.66	5.73	5.85	5.84	5.66	5.94%	5.78%	
ANR Pipeline	9.62	001814AR3	Deb	11/01/2021	A-	6.87	6.96	6.93	6.92	6.77	6.66	6.66	6.62	6.55	6.44	6.42	6.54	6.70%	6.47%	
ANR Pipeline	7	001814AS1	Deb	06/01/2025	A-	6.86	6.81	6.83	6.81	6.09	5.98	5.98	5.68	5.53	5.65					

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Apache Corp.	5.62	037411AS4	Nts	01/15/2017	A-	4.95	5.01	5.00	4.96	4.86	4.80	4.74	4.74	4.70	4.73	4.74	4.84%	4.72%		
Apache Corp.	5.25	037411AT2	Nts	04/15/2013	A-	4.83	4.85	4.87	4.86	4.85	4.86	4.86	4.88	4.92	4.92	4.94	4.96	4.88%	4.94%	
EOG Resources, Inc.	5.88	26875PA99	Sr Nts	09/15/2017	A-	5.17	5.23	5.24	5.23	5.13	5.13	5.00	4.96	4.98	4.93	4.92	4.92	5.07%	4.92%	
Enron Oil & Gas	6.65	293562AD6	Nts	04/01/2028	A-	6.20	6.15	6.13	6.11	5.95	6.05	5.83	5.66	5.38	5.35	5.27	5.17	5.77%	5.26%	
KeySpan Corp.	8	49337WAC4	Nts	11/15/2030	A-	6.62	6.57	6.59	6.50	6.31	6.43	6.26	5.93	5.66	5.78	5.67	5.97	6.19%	5.81%	
KeySpan Corp.	4.65	49337WAG5	Nts	04/01/2013	A-	4.43	4.45	4.42	4.42	4.41	4.42	4.42	4.42	4.45	4.46	4.49	4.49	4.44%	4.48%	
KeySpan Corp.	5.88	49337WAH3	Nts	04/01/2033	A-	5.98	5.92	5.94	5.88	5.68	5.80	5.62	5.29	5.01	5.13	5.04	4.92	5.52%	5.03%	
Apache Corp.	7.625		Deb	11/01/2096	A-	6.37	6.31	6.24	6.26	6.24	6.07	5.81	5.46	5.25	5.48	5.18	5.22	5.78%	5.15%	
Atmos Energy Corp.	6.75	049560AA3	Deb	07/15/2028	BBB+	6.29	6.24	6.26	6.24	6.24	6.07	5.81	5.54	5.24	5.11	5.30	5.05	5.71%	5.15%	
Atmos Energy Corp.	7.38	049560AB1	Sr Nts	05/15/2011	BBB+	7.24	7.28	7.31	7.36									7.30%		
Atmos Energy Corp.	5.12	049560AC9	Sr Nts	01/15/2013	BBB+	4.84	4.86	4.87	4.86	4.84	4.84	4.84	4.85	4.88	4.90	4.91	4.94	4.87%	4.92%	
Atmos Energy Corp.	4.95	049560AF2	Sr Nts	10/15/2014	BBB+	4.60	4.64	4.66	4.58	4.53	4.51	4.51	4.49	4.53	4.51	4.51	4.52	4.55%	4.51%	
Atmos Energy Corp.	5.95	049560AG0	Sr Nts	10/15/2034	BBB+	6.19	6.13	6.15	6.12	5.93	5.62	5.62	5.21	4.93	5.18	4.80	4.88	5.56%	4.95%	
Atmos Energy Corp.	6.35	049560AH8	Sr Nts	06/15/2017	BBB+	5.70	5.67	5.69	5.68	5.51	5.39	5.39	5.24	5.30	5.36	5.33	5.35	5.47%	5.35%	
Cascade Natural Gas Corp.	5.25	147339AJ4	Nts	02/01/2035	BBB+	5.56	5.53	5.55	5.50	5.34	5.30	5.30	5.33	5.25	5.41	5.46	5.33	5.41%	5.40%	
Devon Fin Corp	7.95	251799AA0	Sr Deb	04/15/2032	BBB+	6.13	6.11	6.14	6.08	5.89	6.12	5.93	5.84	5.59	5.54	5.81	5.55	5.89%	5.63%	
ENSCO International Inc.	7.2	268740AB6	Deb	11/15/2027	BBB+	6.77	6.72	6.73	6.55	6.38	6.48	6.32	6.11	5.80	5.91	6.54	6.57	6.41%	6.34%	
OceanEnergy	8.25	674812AK8	Sr Nts 'B'	07/01/2018	BBB+	6.56	6.59	6.60	6.58	6.43	6.48	6.37	6.30	6.34	6.40	6.43	6.36	6.45%	6.40%	
Southwest Gas Corp.	8	844895AL6	Deb	08/01/2026	BBB+	7.08	7.01	6.97	6.90	6.41	6.47	6.32	5.96	5.86	6.02	5.83	5.79	6.39%	5.88%	
Amerada Hess Corp.	7.875	023551AF1	Nts	10/01/2029	BBB	6.31	6.39	6.37	6.31	6.11	6.16	6.16	6.12	5.95				5.86	6.17%	5.86%
Amerada Hess Corp.	7.3	023551AJ3	Nts	08/15/2031	BBB	6.12	6.22	6.22	6.15	5.95	6.01	6.01	5.92	5.73				5.68	6.00%	5.68%
Buckeye Partners, L.P.	5.12	118230AE1		07/01/2017	BBB	4.88	4.91	4.92	4.90	4.78	4.71	4.71	4.63	4.67	4.74	4.70	4.69	4.77%	4.71%	
Enbridge Energy Partners, L.P.	4.75	29250RAC0	Sr Nts 'B'	06/01/2013	BBB	4.48	4.50	4.48	4.48	4.46	4.47	4.53	4.53	4.55	4.56	4.52	4.61	4.51%	4.56%	
Enbridge Energy Partners, L.P.	5.95	29250RAD8	Sr Nts 'B'	06/01/2033	BBB	6.30	6.02	6.03	6.01	5.81	5.93	5.68	5.58	5.36	5.53	5.26	5.20	5.73%	5.33%	
Enbridge Energy Partners, L.P.	5.88	29250RAH9	Nt	12/15/2016	BBB	5.26	5.25	5.30	5.24	5.15	5.15	5.03	4.99	5.14	5.11	5.09	5.13	5.15%	5.11%	
Energen Corp.	5	29265NAQ1	Nts	10/01/2013	BBB	4.79	4.82	4.84	4.84	4.81	4.81	4.81	4.80	4.84	4.83	4.84	4.82	4.84	4.82%	4.84%
Equitable Resources, Inc.	7.75	294549AE0	Deb	07/15/2026	BBB	7.13	7.12	7.14	6.95	6.74	6.81	6.59	6.45	6.43	6.52	6.52	6.40	6.73%	6.48%	
Kinder Morgan Energy Partners, L.P.	7.4	94550AJ5	Nts	03/15/2031	BBB	6.63	6.61	6.59	6.50	6.34	6.50	6.31	6.33	6.16	6.21	6.19	6.38%	6.21%		
Kinder Morgan Energy Partners, L.P.	7.125	94550AK2	Nts	03/15/2012	BBB	6.69	6.73	6.73	6.74	6.79	6.83	6.86	6.91	6.95	6.98	7.01	7.04	6.86%	7.01%	
Kinder Morgan Energy Partners, L.P.	7.75	94550AL0	Nts	03/15/2032	BBB	6.70	6.65	6.66	6.53	6.37	6.53	6.33	6.38	6.20	6.31	6.28	6.25	6.43%	6.28%	
Kinder Morgan Energy Partners, L.P.	7.3	94550AQ9	Sr Nts	08/15/2033	BBB	6.52	6.58	6.53	6.42	6.25	6.41	6.20	6.29	6.14	6.25	6.26	6.25	6.34%	6.25%	
Kinder Morgan Energy Partners, L.P.	5	94550AR7	Sr Nts	12/15/2013	BBB	4.56	4.60	4.62	4.61	4.59	4.61	4.62	4.64	4.67	4.68	4.69	4.71	4.63%	4.69%	
Kinder Morgan Energy Partners, L.P.	6	94550AU0	Sr Nt	2/1/2017	BBB	5.39	5.42	5.38	5.36	5.25	5.32	5.21	5.30	5.28	5.32	5.30	5.31	5.30%		
Kinder Morgan Energy Partners, L.P.	6.5	94550AV8	Sr Nt	2/1/2037	BBB	6.35	6.35	6.31	6.22	6.00	6.24	5.92	6.08	6.07	5.99	6.01	5.90	6.12%	5.97%	
Kinder Morgan Energy Partners, L.P.	6.95	94550AW6	Sr Nt	1/15/2038	BBB	6.45	6.47	6.47	6.29	6.12	6.40	6.04	6.25	6.23	6.06	6.06	6.15	6.25%	6.09%	
Lakehead Pipe Line Co	7	511546AA1	Sr Nts	10/01/2018	BBB	6.09	6.14	6.16	6.13	6.02	6.07	5.92	5.84	5.79	5.85	5.84	5.98%	5.85%		
Lakehead Pipe Line Co	7.12	511546AB9	Sr Nts	10/01/2028	BBB	6.70	6.65	6.66	6.64	6.14	6.25	6.10	5.94	5.61	5.69	5.62	5.55	6.13%	5.62%	
Lakehead Pipe Line Co	7.9	511546AE3	Sr Nts	11/21/2012	BBB	7.16	7.20	7.24	7.25	7.28	7.31	7.33	7.37	7.41	7.44	7.47	7.51	7.33%	7.47%	
Marathon Oil Corp.	6.8	565849AB2	Nts	03/15/2032	BBB	6.01	5.96	6.06	6.05	5.88	6.07	5.87	5.57	5.72	5.58	5.37	5.57	5.81%	5.51%	
Murphy Oil Corp.	7.05	626717AA0	Nts	05/01/2029	BBB	6.37	6.41	6.27	6.25	6.06	6.16	6.00	6.02	5.70	5.96	5.70	5.77	6.06%	5.81%	
Murphy Oil Corp.	6.38	626717AB8	Nts	05/01/2012	BBB	6.03	6.03	6.05	6.08	6.10	6.12	6.15	6.18	6.20	6.22	6.25	6.27	6.14%	6.25%	
National Fuel Gas Co.	5.25	636180BE0	Nts	03/01/2013	BBB	4.95	4.97	4.97	4.95	4.93	4.96	4.96	4.97	5.00	5.03	5.04	5.04	4.98%	5.04%	
ONEOK, Inc.	6.5	682680AA1	Sr InsurNts	09/30/2028	BBB	6.69	6.54	6.57	6.55	6.48	6.49	6.48	6.50	6.50	6.55	6.49	6.49	6.53%	6.51%	
ONEOK, Inc.	6.88	682680AB9	Deb	09/30/2028	BBB	6.53	6.51	6.46	6.44	6.26	6.37	6.20	6.11	5.93	6.01	5.81	5.83	6.21%	5.88%	
ONEOK, Inc.	5.2	682680AM5	Nts	06/15/2015	BBB	4.83	4.83	4.84	4.84	4.73	4.75	4.70	4.71	4.74	4.72	4.72	4.74	4.76%	4.73%	
ONEOK Partners, L.P.	5.9	68268NAA1	Gtd Sr Nt	4/1/2012	BBB	5.60	5.62	5.63	5.64	5.66	5.69	5.25	5.74	5.77	5.78	5.81	5.83	5.67%	5.81%	
ONEOK Partners, L.P.	6.15	68268NAB9	Gtd Sr Nt	10/1/2016	BBB	5.36	5.43	5.44	5.44	5.33	5.34	5.25	5.33	5.41	5.34	5.35	5.35	5.36%	5.35%	
ONEOK Partners, L.P.	6.65	68268NAC7	Gtd Sr Nt	10/1/2036	BBB	6.29	6.21	6.26	6.16	5.95	6.13	5.83	5.72	5.66	5.53	5.62	5.94%	5.60%		
USX Corp.	9.375	902905AK4	Deb	02/15/2012	BBB	8.66	8.72	8.76	8.80	8.87	8.93	8.99	9.05	9.11	9.17	9.23	9.29	8.97%	9.23%	
USX Corp.	9.375	902905AL2	Deb	05/15/2022	BBB	7.05	7.45	7.47	7.46	7.28	7.36	7.18	6.94	6.88	6.97	6.93	6.83	7.15%	6.91%	
USX Corp.	9.125	902905AM0	Deb	01/15/2013	BBB	8.15	8.19	8.23	8.24	8.26	8.31	8.33	8.37	8.42	8.46	8.51	8.54	8.33%	8.50%	
USX Corp.	8.5	902905AN8	Deb	03/01/2023	BBB	6.80	6.82	6.84	6.82	6.65	6.73	6.55	6.31	6.25	6.33	6.29	6.20	6.55%	6.27%	
USX Corp.	8.125	902905AQ1	Deb	07/15/2023	BBB	6.65	6.67	6.69	6.67	6.50	6.57	6.39	6.15	6.09	6.17	6.13	6.03	6.39%	6.11%	
Valero Energy Corp. (New)	8.75	91913YAB6	Nts	06/15/2030	BBB	7.79	7.49	7.50	7.25	6.97	7.11	6.93	7.03	6.80	6.88	6.74	6.72	7.10%	6.78%	
Valero Energy Corp. (New)	6.875	91913YAD2	Nts	04/15/2012	BBB	6.43	6.48	6.49	6.52	6.55	6.57	6.60	6.64	6.67	6.70	6.72	6.76	6.59%	6.73%	
Valero Energy Corp. (New)	7.5	91913YAE0	Nts	04/15/2032	BBB	6.73	6.73	6.80	6.65	6.45	6.72	6.36	6.68	6.49	6.25	6.33	6.40	6.55%	6.33%	
Valero Energy Corp. (New)	4.75	91913YAG5	Nts	06/15/2013	BBB	4.45	4.45	4.47	4.47	4.46	4.47	4.47	4.48							

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Anadarko Petroleum Corp.	5	032511AU1	Nts	10/01/2012	BBB-	4.77	4.78	4.80	4.79	4.80	4.81	4.81	4.85	4.89	4.84	4.88	4.88	4.83%	4.87%
Anadarko Petroleum Corp.	5	032511AU1	Nts	10/01/2012	BBB-	4.77	4.78	4.80	4.79	4.80	4.81	4.81	4.85	4.89	4.84	4.88	4.88	4.83%	4.87%
Anadarko Petroleum Corp.	5.95	032511AX5	Sr Nts	09/15/2016	BBB-	5.42	5.42	5.45	5.37	5.25	5.23	5.23	5.32	5.48	5.18	5.37	5.24	5.33%	5.26%
Anadarko Petroleum Corp.	6.45	032511AY3	Sr Nts	09/15/2036	BBB-	6.61	6.40	6.47	6.34	6.08	6.09	6.09	6.34	6.15	5.63	5.81	5.65	6.14%	5.70%
Boardwalk Pipelines Llc	5.5	096629AA8	Nt	2/1/2017	BBB-	5.16	5.19	5.15	5.13	5.01	4.91	4.91	4.97	5.01	5.08	5.11	5.04	5.08%	5.08%
Boardwalk Pipelines Lp	5.88	096630AA6	Sr Nt	11/15/2016	BBB-	5.31	5.35	5.37	5.35	5.19	5.17	5.17	5.21	5.21	5.29	5.32	5.22	5.26%	5.28%
Energy Transfer Partners, L.P.	5.95	29273RAB5	Sr Nt	2/1/2015	BBB-	5.38	5.40	5.42	5.40	5.32	5.37	5.32	5.37	5.55	5.50	5.51	5.50	5.42%	5.50%
Energy Transfer Partners, L.P.	5.65	29273RAD1	Sr Nt	8/1/2012	BBB-	5.34	5.36	5.39	5.38	5.40	5.39	5.41	5.44	5.48	5.48	5.51	5.53	5.43%	5.51%
Energy Transfer Partners, L.P.	6.12	29273RAE9	Sr Nt	2/15/2017	BBB-	5.53	5.51	5.44	5.49	5.40	5.50	5.44	5.49	5.63	5.56	5.60	5.57	5.51%	5.58%
Energy Transfer Partners, L.P.	6.62	29273RAF6	Sr Nt	10/15/2036	BBB-	6.24	6.25	6.34	6.23	6.11	6.42	6.21	6.38	6.45	6.22	6.16	6.30	6.28%	6.23%
Enterprise Products Oper	6.375	293791AD1	Sr Nts 'B'	02/01/2013	BBB-	5.82	5.86	5.89	5.89	5.91	5.94	5.95	5.98	6.02	6.03	6.07	6.08	5.95%	6.08%
Enterprise Products Oper	5.6	293791AN9	Sr Nts 'B'	10/15/2014	BBB-	5.02	5.05	5.06	5.04	5.02	5.04	5.02	5.10	5.12	5.08	5.10	5.11	5.06%	5.10%
Enterprise Products Oper	6.65	293791AP4	Sr Nts 'B'	10/15/2034	BBB-	6.22	6.20	6.24	6.17	5.99	6.13	5.88	5.93	5.77	5.48	5.81	5.63	5.95%	5.64%
Enterprise Products Oper	5	293791AR0	Sr Nts 'B'	03/01/2015	BBB-	4.61	4.66	4.66	4.65	4.57	4.59	4.52	4.62	4.60	4.59	4.59	4.60%	4.59%	
Enterprise Products Oper	5.75	293791AT6	Sr Nts 'B'	03/01/2035	BBB-	5.96	6.00	6.01	5.94	5.77	5.92	5.66	5.72	5.53	5.30	5.60	5.40	5.73%	5.43%
Kern-McGee Corp.	7.125	492386AK3	Deb	10/15/2027	BBB-	6.81	6.48	6.54	6.41	6.29	6.43	6.20	6.19	6.19	6.05	6.17	5.99	6.31%	6.07%
Kern-McGee Corp.	7.875	492386AT4	Nts	09/15/2031	BBB-	7.00	6.77	6.90	6.73	6.40	6.55	6.34	6.52	6.40	6.04	6.28	6.53%	6.24%	
Kern-McGee Corp.	6.95	492386AU1	Nts	07/01/2024	BBB-	6.37	6.19	6.27	6.23	6.02	6.10	5.85	5.91	5.95	5.75	5.87	5.82	6.03%	5.81%
Northwest Pipeline	7.12	667748AF4	Deb	12/01/2025	BBB-	6.08	6.07	6.09	5.96	5.77	5.99	5.78	5.66	5.59	5.62	5.67	5.62	5.83%	5.64%
Northwest Pipeline	7	667748AM9	Sr Nts	06/15/2016	BBB-	5.89	5.95	5.93	5.93	5.81	5.87	5.79	5.83	5.91	5.91	5.93	5.92	5.89%	5.92%
Panhandle East'n P.L.	6.05	698465BJ9	Sr Nts 'B'	08/15/2013	BBB-	5.61	5.58	5.60	5.59	5.55	5.56	5.57	5.59	5.61	5.62	5.64	5.65	5.60%	5.64%
Pioneer Natural Resources Co.	7.2	723787AB3	Sr Nts	01/15/2028	BBB-	7.00	6.78	6.90	6.78	6.83	6.87	6.71	6.78	6.73	6.81	6.35	6.29	6.74%	6.48%
Pioneer Natural Resources Co.	6.88	723787AF4	Sr Nts	05/01/2018	BBB-	6.38	6.33	6.39	6.35	6.27	6.37	6.25	6.35	6.40	6.40	6.11	6.07	6.31%	6.19%
Pioneer Natural Resources Co.	6.65	723787AG2	Sr Nts	03/15/2017	BBB-	6.21	6.15	6.18	6.11	6.07	6.11	6.04	6.17	6.21	6.14	5.99	6.01	6.12%	6.05%
Plains All Amer/PAA Fin	5.25	72650RAJ1	Sr Nts	06/15/2015	BBB-	5.03	4.89	4.91	4.91	4.77	4.82	4.75	4.75	4.78	4.80	4.85	4.80	4.84%	4.82%
Plains All Amerm Pipeline L P	6.7	72650RAM4	Sr Nt	5/15/2036	BBB-	6.45	6.30	6.27	6.23	6.06	6.29	5.93	5.87	5.88	5.83	5.98	5.63	6.06%	5.81%
Southern Union Co.	7.6	844030AA4	Sr Nts	02/01/2024	BBB-	7.01	6.89	6.91	6.74	6.50	6.52	6.33	6.25	6.42	6.52	6.34	6.46	6.57%	6.44%
Southern Union Co.	8.25	844030AC0	Sr Nts	11/15/2029	BBB-	7.65	7.27	7.28	7.15	6.82	6.86	6.76	6.70	7.00	7.16	6.76	6.94	7.03%	6.95%
Transcont'l Gas PipeLine	7.08	893570BL4	Deb	07/15/2026	BBB-	6.72	6.74	6.76	6.74	6.52	6.61	6.39	6.24	6.16	6.16	6.04	6.44%	6.12%	
Transcont'l Gas PipeLine	7.25	893570BM2	Deb	12/01/2026	BBB-	6.23	6.26	6.28	6.25	6.05	6.14	5.93	6.13	6.05	5.76	5.66	6.04%	5.73%	
Transcont'l Gas PipeLine	8.88	893570BT7	Sr Nts 'B'	07/15/2012	BBB-	8.00	8.06	8.10	8.13	8.18	8.22	8.26	8.33	8.49	8.48	8.53	8.26%	8.48%	
Transcont'l Gas PipeLine	6.4	893570BW0	Sr Nt	4/15/2016	BBB-	5.54	5.57	5.56	5.56	5.44	5.52	5.45	5.45	5.51	5.50	5.55	5.52	5.51%	5.52%
Union Pacific Resources Group	7.5	907834AB1	Deb	10/15/2026	BBB-	6.87	6.61	6.63	6.45	6.12	6.19	6.80	6.00	5.85	5.99	6.02	6.29%	5.95%	
Union Pacific Resources Group	7.05	907834AF2	Deb	05/15/2018	BBB-	6.46	6.38	6.42	6.33	6.15	6.17	6.04	5.99	6.11	6.17	6.27	6.22%	6.20%	
Union Pacific Resources Group	7.15	907834AG0	Deb	05/15/2028	BBB-	7.07	6.79	6.75	6.64	6.37	6.38	6.21	6.33	6.33	6.05	6.18	6.17	6.44%	6.13%
Williams Ptns L P	7.25	96950HAD2	Sr Nt	2/1/2017	BBB-	6.18	6.20	6.18	6.16	6.03	6.15	6.01	6.05	6.25	6.10	6.17	6.11	6.13%	6.13%
Anadarko Petroleum Corp.	7.73	Deb	09/15/2096	BBB-	7.78	7.63		7.22	6.99	7.14	6.82	6.93	6.82	6.42	6.67	6.37	6.98%	6.49%	
Anadarko Petroleum Corp.	7.25	Deb	11/15/2096	BBB-	7.99	7.73		7.32	6.98	7.17	6.85	6.83	6.72	6.37	6.61	6.32	6.99%	6.43%	
Union Pacific Resources Group	7.5	Deb	11/01/2096	BBB-	8.04	7.78		7.24	6.93	7.12	6.80	6.82	6.72	6.36	6.61	6.32	6.98%	6.43%	
Chesapeake Energy Corp.	6.5	165167BS5	Sr Nts	08/15/2017	BB+	6.26	6.06	6.01	5.94	6.04	6.17	6.17	6.28	6.20	6.06	6.37	6.10	6.14%	6.18%
Chesapeake Energy Corp.	6.88	165167BU0	Sr Nts	11/15/2020	BB+	6.50	6.45	6.36	6.25	6.47	6.57	6.57	6.61	6.42	6.29	6.61	6.42	6.46%	6.44%
Chesapeake Energy Corp.	7.62	165167BY2	Sr Nts	07/15/2013	BB+	6.93	6.83	6.80	6.91	6.96	6.99	7.15	7.19	7.12	7.22	7.21	7.03%	7.18%	
Chesapeake Energy Corp.	7.25	165167CC9	Sr Nts	12/15/2018	BB+	6.80	6.57	6.53	6.44	6.51	6.71	6.71	6.83	6.68	6.53	6.72	6.56	6.63%	6.60%
Cimarex Energy Co.	7.12	171798AA9	Sr Nts	05/01/2017	BB+	6.75	6.75	6.75	6.75	6.73	6.81	7.01	6.98	6.78	6.78	6.91	6.83	6.82%	6.84%
Sun Co	9	866762AK3	Deb	11/01/2024	BB+	7.55	7.57	7.60	7.23	7.04	7.11	6.91	6.72	6.54	6.63	6.86	6.75	7.04%	6.75%
Suncor, Inc.	5.75	867649PAD1	Nts	01/15/2017	BB+	5.45	5.44	5.39	5.38	5.27	5.34	5.49	5.80	5.83	5.74	5.75	5.57	5.55%	5.74%
Tesco Petroleum Corp.	6.25	881609AQ4	Sr Sub Nts	11/01/2012	BB+	5.96	5.93	5.92	5.93	5.95	5.95	5.95	6.01	6.05	5.98	6.02	6.09	5.98%	6.03%
Tesco Petroleum Corp.	6.62	881609AS0	Sr Sub Nts	11/01/2015	BB+	6.43	6.43	6.43	6.40	6.43	6.48	6.46	6.50	6.58	6.49	6.52	6.51	6.47%	6.51%
Williams Companies, Inc. (The)	10.25	969457AH3	Deb	07/15/2020	BB+	8.60	8.60		6.70	6.74	6.79	6.70	6.88	6.66	6.74	6.69	6.53	8.60%	
Williams Companies, Inc. (The)	9.375	969457AK6	Deb	11/15/2021	BB+	8.41	8.41		6.72	6.74	6.78	6.70	6.88	6.66	6.74	6.69	6.53	8.41%	
Williams Companies, Inc. (The)	8.875	969457AKM2	Deb	09/15/2012	BB+	6.81	6.51		7.21	6.74	6.79	6.70	6.34	6.88	6.66	6.74	6.66%		
Williams Companies, Inc. (The)	7.625	969457AW0	Nts	07/15/2019	BB+	6.73	6.39	6.41	6.36		6.49	6.39	6.32	6.64	6.59	6.17	6.24	6.43%	6.33%
Williams Companies, Inc. (The)	7.5	969457BB5	Deb	01/15/2031	BB+	6.80	6.39	6.40	6.31	5.99	6.56	6.33	6.42	6.41	6.26	5.94	6.15	6.33%	6.12%
Williams Companies, Inc. (The)	7.75	969457BD1	Nts	06/15/2031	BB+	6.92	6.51	6.52	6.43	6.14	6.64	6.43	6.47	6.46	6.30	6.04	6.23	6.42%	6.19%
Williams Companies, Inc. (The)	7.875	969457BG4	Nts	09/01/2021	BB+	6.61	6.30	6.32	6.26	6.04	6.35	6.22	6.26	6.64	6.26	6.14	6.39	6.32%	6.26%
Williams Companies, Inc. (The)	8.125	969457BK5	Nts	03/15/2012	BB+	7.67	7.64	7.68	7.70	7.74	7.80	7.83	7.13	7.94	7.95	7.94	8.00	7.75%	7.96%
Williams Companies, Inc. (The)	8.75	969457BM1	Nts	03/15/2032	BB+	7.21	6.74	6.79	6.70	6.34	6.88	6.66	6.74	6.69</					

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Kinder Morgan Inc	5.15	494553AC4	Sr Nts	03/01/2015	BB	5.04	5.01	4.91	4.92	4.90	4.93	4.92	5.04	5.10	5.04	5.09	5.04	5.00%	5.06%	
Plains Exploration & Production Comp	7	726505AC4	SrNts	03/15/2017	BB	6.69	6.71	6.74	6.76	6.81	6.80	6.70	6.93	7.00	6.72	6.71	6.76	6.78%	6.73%	
Plains Exploration & Production Comp	7.75	726505AD2	SrNts	06/15/2015	BB	7.39	7.38	7.42	7.43	7.45	7.48	7.47	7.52	7.46	7.45	7.50	7.46%	7.47%		
Range Resources Corp.	7.38	75281AAB5	Sr Sub Nts	07/15/2013	BB	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30%	7.30%	
Range Resources Corp.	7.5	75281AAG4	Sr Sub Nts	05/15/2016	BB	7.17	7.17	7.21	7.21	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.22%	7.23%	
Range Resources Corp.	7.5	75281AAH2	Sr Sub Nts	10/01/2017	BB	7.04	7.05	7.00	7.00	7.03	7.06	7.04	7.09	7.08	7.00	7.07	7.05	7.04%	7.04%	
Range Resources Corp.	7.25	75281AAJ8	Sr Sub Nts	05/01/2018	BB	6.80	6.80	6.77	6.77	6.81	6.84	6.79	6.84	6.81	6.72	6.80	6.77	6.79%	6.78%	
Southern Natural Gas	7.35	843452AY9	Nts	02/15/2031	BB	6.95	6.50	6.47	6.42	6.09	6.31	6.14	6.04	6.27	6.26	6.23	6.25	6.33%	6.25%	
Southern Natural Gas	8	843452AZ6	Nts	03/01/2032	BB	6.85	6.68	6.59	6.49	6.27	6.38	6.21	6.25	6.20	6.30	6.45	6.46	6.43%	6.40%	
Tennessee GasPipeline	7	880451AS8	Deb	03/15/2027	BB	6.55	6.32	6.33	6.28	6.02	6.13	5.95	5.92	6.03	6.14	6.15	5.85	6.14%	6.05%	
Tennessee GasPipeline	7.5	880451AT6	Deb	04/01/2017	BB	6.46	6.41	6.37	6.29	6.14	6.21	6.11	6.12	6.35	6.28	6.32	6.29	6.28%	6.30%	
Tennessee GasPipeline	7.62	880451AU3	Deb	04/01/2037	BB	6.78	6.48	6.45	6.43	6.14	6.32	6.13	6.04	6.03	6.36	6.14	6.39	6.31%	6.30%	
Tennessee GasPipeline	7	880451AV1	Deb	10/15/2028	BB	6.53	6.28	6.29	6.24	6.01	6.08	5.92	5.87	5.98	6.10	6.73	6.09	6.18%	6.31%	
Tennessee GasPipeline	8.38	880451AW9	Nts	06/15/2032	BB	7.02	6.74	6.72	6.70	6.39	6.62	6.44	6.38	6.37	6.61	6.73	6.60	6.61%	6.65%	
Whiting Petroleum Corp.	7	966387AE2	Sr Sub Nts	02/01/2014	BB	6.60	6.57	6.57	6.52	6.48	6.51	6.52	6.60	6.57	6.48	6.60	6.57	6.55%	6.55%	
KN Energy /Kinder Morgan	7.45		Sr Deb	03/01/2098	BBB	9.83	10.00		8.87	8.66	8.82	8.57	8.22	7.55	7.84	7.84	8.55%	7.84%		
El Paso Corp.	7.88	28336LAE9	Nts	06/15/2012	BB-	7.47	7.46	7.48	7.42	7.48	7.48	7.51	7.57	7.61	7.63	7.66	7.70	7.54%	7.66%	
Ferrellgas, L.P./Finance	6.75	315292AD4	SrNts	05/01/2014	B+	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72	6.72%	6.72%	
KCS Energy, Inc.	7.125	482434AF4	Sr Nts	04/01/2012	B+	7.10	7.12	7.12	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13%	7.13%
Mariner Energy, Inc.	7.5	56845TAE7	Sr Nts	04/15/2013	B+													7.22%	7.22%	
Swift Energy Co.	7.12	870738AF8	SrNts	06/01/2017	B+	6.97	6.98	6.96	6.95	6.93	7.04	6.92	7.20	7.27	7.08	7.28	7.16	7.06%	7.17%	
Atlas Pipeline Ptns	8.12	04939MAC3	Sr Nt	12/15/2015	B	7.85	7.78	7.80	7.80									7.81%		
Berry Petroleum Co.	8.25	085789AC9	Sr SubNts	11/01/2016	B	7.83	7.81	7.81	7.81	7.85	7.97	7.97	7.99	7.99	7.97	8.00	7.93	7.91%	7.97%	
Quicksilver Resources Inc.	7.12	74837RAC8	Sr Sub Nts	04/01/2016	B-	7.42	7.32	7.19	7.17	7.23	7.23	7.09	7.54	8.16	7.19	7.51	7.16	7.35%	7.29%	
Quicksilver Resources Inc.	7.12	74837RAC8	Sr Sub Nts	04/01/2016	B-	7.42	7.32	7.19	7.17	7.23	7.23	7.09	7.54	8.16	7.19	7.51	7.16	7.35%	7.29%	
Stone Energy Corp.	6.75	861642AG1	Sr Sub Nts	12/15/2014	CCC+	6.87	6.78	6.80	6.77	6.77	6.78	6.80	6.85	7.03	6.81	6.85	6.85	6.83%	6.84%	
Delta Petroleum Corp.	7	247907AC2	Sr Nts	04/01/2015	D	10.52	9.72	9.12	8.97	8.92	9.21	9.03	9.03	9.33	9.45	9.09	8.13	9.21%	8.89%	
Brigham Exploration Co.	9.62	109178AB9	Sr Nts	05/01/2014	NR	9.16												9.16%		
Burlington Resources Fin	6.4	12201PAC0	Gtd Nt	8/15/2011	NR	6.03												6.03%		
Conoco Inc	6.35	20825UAB0	Nts	10/15/2011	NR	5.73												5.73%		
Consolidated Nat Gas	6.62	209615BN2	Deb	12/01/2013	NR													6.08	6.08%	
Consolidated Nat Gas	6.88	209615BQ5	Deb	10/15/2026	NR													5.62	5.62%	
Consolidated Nat Gas	6.8	209615BS1	Deb	12/15/2027	NR													5.54	5.54%	
Delta Natural Gas Co., Inc.	5.75	247748AG1	InsurQtrly Nts	04/01/2021	NR	6.26	6.27	6.08	6.06	5.91	5.96	5.86	5.90	6.03	6.14	5.75	5.75	6.00%	5.88%	
El Paso Corp.	7	28336LAB5	Sr Nts	05/15/2011	NR	6.90	6.93	6.95	6.99	5.94	5.94	5.94	5.94	5.94	5.94	5.94	5.94	5.94%	5.94%	
Encore Acquisition	6	29255WAG5	Sr Sub Nt	7/15/2015	NR													7.50%		
Enterprise Products Oper	7.5	312971AB5	Sr Nts	02/01/2011	NR	7.50												8.75%	8.75%	
Ferrellgas Partners L.P.	8.75	31529MAA6	Sr Nts	06/15/2012	NR	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75%		
Forest Oil Corp.	8	346091AS0	Sr Nts	12/15/2011	NR	7.65	7.65	7.69	7.71	7.77	7.80	7.86	7.88	8.00	7.95	8.00		7.81%	7.98%	
Forest Oil Corp.	7.75	346091AU5	Sr Nts	05/01/2014	NR	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65%	7.65%	
Forest Oil Corp.	8	346091AW1	Sr Nts	12/15/2011	NR	7.65	7.65	7.69	7.71	7.77	7.80	7.86	7.88	8.00	7.95	8.00		7.81%	7.98%	
Houston Exploration Co. (The)	7	442120AE1	Sr Sub Nts	06/15/2013	NR	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00%	7.00%	
Kerr-McGee Corp.	7	492386AD9	Deb	1/1/2011	NR													6.82%		
Kerr-McGee Corp.	6.875	492386AS6	Nts	09/15/2011	NR	6.64	6.67	6.70	6.72	6.76	6.79	6.83	6.86	6.88				6.76%		
Kinder Morgan Energy Partners, L.P.	6.75	494550AH9	Nts	03/15/2011	NR	6.70	6.74											6.72%		
Marathon Oil Corp.	6.125	565849AA4	Nts	03/15/2012	NR	5.76	5.79	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80%	5.80%	
Mariner Energy, Inc.	8	56845TAF4	Sr Nts	05/15/2017	NR													7.02	7.02%	
National Fuel Gas Co.	6.5	636180BD2	Nts	09/15/2022	NR	4.96												4.96%		
Newfield Exploration Co.	6.62	651290AH1	Sr Sub Nts	09/01/2014	NR	6.47	6.47	6.47	6.49	6.50	6.53	6.53	6.58	6.59	6.55	6.59	6.55	6.53%	6.56%	
Newfield Exploration Co.	6.62	651290AJ7	Sr Sub Nts	04/15/2016	NR	6.40	6.41	6.41	6.41	6.41	6.42	6.42	6.46	6.56	6.43	6.46	6.43	6.44%	6.44%	
Northern IllinoisGas	6.62	665228BU5	1st	02/01/2011	NR	6.88												6.88%		
Ocean Energy	7.25	67481EAA4	Sr Nts	10/01/2011	NR	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73		6.73%		
Offshore Logistics, Inc.	6.12	676255AL6	SrNts	06/15/2013	NR	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06	6.06%	6.06%
ONEOK, Inc.	6.4	682680AD5	Sr InsurNts	02/01/2019	NR	6.46	6.45	6.47	6.43	6.39	6.39	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.42%	6.40%
ONEOK, Inc.	7.12	682680AL7	Sr Nts	04/15/2011	NR	7.03	7.07											7.05%		
Penn Virginia Corp.	4.5	707882AA4	Sr Sub Nt Conv	11/15/2012	NR	4.53	4.48	4.37	4.37									4.44%		
Petrohawk Energy Corp.	9.12	716495AB2	Sr Nts	07/15/2013	NR	8.73												8.73%		
Phillips Petroleum	9.375	718507AR7	Nts	02/15/2011	NR	9.34												9.34%		
Piedmont Natural Gas Co., Inc.	6.25	720186AF2	InsurQtrly Nts	06/01/2036	NR	6.31	6.30	6.32	6.23	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.26%	6.25%	
Piedmont Natural Gas	6.55	72018QAJ0	M-T Nts 'C'	09/26/2011	NR	6.31	6.34	6.36	6.38	6.42	6.46	6.49	6.53	6.55				6.43%		
Plains All American Pipeline, L.P.	7.75	726503AD7	Sr Nts	10/15/2012	NR	6.96	6.99		7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00		6.99%	7.00%	
Plains Explor & Prod	8.75	726507AC0	Sr Sub Nts'B	07/01/2012	NR	8.25	8.25	8.25	8.25	8.25	8.25							8.25%		
Southwest Gas Corp.	8.38	844895AR3	Nts	02/15/2011	NR	8.35												8.35%		
Stone Energy Corp.	8.25																			

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
TEPPCO Partners, L.P.	6.125	872384AB8	Sr Nts	02/01/2013	NR	5.65	5.68	5.71	5.69	5.72	5.74	5.76	5.80	5.81	5.85	5.86	5.75%	5.84%	
Tennessee Gas Pipeline	6	880451AJ8	Deb	12/15/2011	NR	6.00	6.00	6.00	6.00	6.01	6.01	6.00	6.00	6.00	6.00	6.00	6.00	6.00%	6.00%
Valero Energy	6.7	919138AD9	Sr Nts	01/15/2013	NR	6.23	6.26	6.27	6.28	6.19	6.22	6.25	6.28	6.30	6.33	6.34	6.34	6.27%	6.32%
Varco International, Inc.	7.25	922122AB2	Sr Nts	05/01/2011	NR	7.14	7.17	7.21	7.25									7.19%	
Whiting Petroleum Corp.	7.25	966387AB8	Sr Sub Nts	05/01/2012	NR	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25%	7.25%
Whiting Petroleum Corp.	7.25	966387AC6	Sr Sub Nts	05/01/2013	NR	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12%	7.12%
Williams Companies, Inc. (The)	7.125	969457BF6	Nts	09/01/2011	NR	6.95	6.93	6.96	6.99	6.34	7.07	7.10	6.74	7.13				6.91%	
Williams Ptns L P	7.5	96950HAB6	Sr Nt 144s	6/15/2011	NR	7.32	7.36	7.39	7.43	7.48								7.40%	
Counts of data						254	246	232	239	231	245	243	243	243	237	236	238	273	244

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
AAA's	5.05%	5.01%
AA's	6.36%	5.98%
A's	6.04%	5.74%
BBB's	6.00%	5.85%
BB's	6.72%	6.58%
BB's	7.32%	7.25%
CCC's	6.83%	6.84%
D	9.21%	8.89%
NR's	6.67%	6.70%
ALL	6.29%	6.05%
BBB- & Above	5.96%	5.76%
BB- & Above	6.12%	5.92%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
XTO Energy Inc.	7.5	98385XAA4	Sr Nts	04/15/2012	AAA						2.04	2.57	3.26	3.84				0.61	2.46%	0.61%
XTO Energy Inc.	6.25	98385XAC0	Sr Nts	04/15/2013	AAA						1.41	1.52	1.71	1.97	0.02	0.02	0.79	1.06%	0.28%	
XTO Energy Inc.	4.9	98385XAD8	Sr Nts	02/01/2014	AAA						1.58	1.47	0.02	0.21	0.32	0.45	0.75	0.69%	0.51%	
XTO Energy Inc.	5.3	98385XAG1	Sr Nts	06/30/2015	AAA						1.68	1.36	1.18	1.39	1.51	1.54	1.05	1.39%	1.37%	
XTO Energy Inc.	5.65	98385XAH9	Sr Nts	04/01/2016	AAA						2.22	1.93	1.72	1.78	1.08	0.88	1.09	1.53%	1.02%	
XTO Energy Inc.	6.1	98385XAJ5	Sr Nts	04/01/2036	AAA						4.98	4.71	4.27	3.76	3.90	3.76	3.61	4.14%	3.76%	
XTO Energy Inc.	5.9	98385XAK2	Sr Nts	08/01/2012	AAA						0.25	0.63	1.18	1.65	2.02	2.48	0.92	1.30%	1.81%	
XTO Energy Inc.	6.25	98385XAL0	Sr Nts	08/01/2017	AAA						2.41	2.08	2.10	2.13	2.24	2.22	1.93	2.16%	2.13%	
XTO Energy Inc.	6.75	98385XAMB	Sr Nts	08/01/2037	AAA						4.76	4.56	4.12	3.44	3.61	3.76	3.51	3.97%	3.63%	
XTO Energy Inc.	4.62	98385XAN6	Sr Nts	06/15/2013	AAA						0.90	0.95	3.26	1.27	1.43	1.58	0.72	1.44%	1.24%	
XTO Energy Inc.	5.5	98385XAP1	Sr Nts	06/15/2018	AAA						3.07	2.72	2.15	2.05	2.22	2.15	1.77	2.30%	2.05%	
XTO Energy Inc.	6.38	98385XAQ9	Sr Nts	06/15/2038	AAA						4.95	4.56	4.03	3.54	3.98	3.81	3.61	4.07%	3.80%	
Texaco Capital	9.75	881685AN1	GtdDeb	03/15/2020	AA	5.35	5.18	5.20	5.16	4.49	4.64	3.79	3.56	3.66	3.29	3.44	3.42	4.27%	3.38%	
Texaco Capital	8.875	881685AV3	GtdDeb	09/01/2021	AA	5.11	4.94	4.96	4.92	4.46	4.61	3.59	3.34	3.44	3.56	3.68	3.42	4.17%	3.55%	
Texaco Capital	8.625	881685AX9	GtdDeb	11/15/2031	AA	6.12	5.84	5.86	5.83	5.49	5.66	4.93	4.68	4.37	4.00	4.07	3.91	5.06%	3.99%	
Texaco Capital	8.625	881685AY7	GtdDeb	04/01/2032	AA	6.13	5.85	5.87	5.83	5.55	5.71	4.98	4.73	4.42	3.98	4.04	3.91	5.08%	3.98%	
Texaco Capital	8	881685BB6	GtdDeb	08/01/2032	AA	6.12	5.83	5.85	5.82	5.51	5.69	4.95	4.71	4.39	4.54	4.61	4.41	5.20%	4.52%	
Texaco Capital	7.5	881685BD2	GtdDeb	03/01/2043	AA	6.84	6.76	6.80	6.77	6.71	6.76	6.73	6.76	6.83	6.83	6.88	6.91	6.80%	6.87%	
Northwest Natural Gas	8.26	66765RA73	Sec M-T Nts B	09/21/2014	A+	2.85	2.95	2.93	2.81	1.83	2.00	1.88	1.39	1.41	1.54	1.71	1.32	2.05%	1.52%	
Northwest Natural Gas	7	66765RAY2	Sec M-T Nts B	08/01/2017	A+	3.88	3.97	3.96	3.87	3.26	3.39	3.05	2.54	2.39	2.45	2.46	2.14	3.11%	2.35%	
Atlantic Richfield	7.63	66765RBF2	Sec M-T Nts B	12/09/2019	A+	4.82	4.85	4.87	4.83	4.59	4.44	4.10	3.39	2.98	3.16	3.10	2.92	4.00%	3.06%	
Atlantic Richfield	9	048825AW3	Deb	04/01/2021	A	5.88	5.91	5.94	5.39	5.37	5.17	5.17	4.74	4.45	4.56	4.49	4.87	5.16%	4.64%	
Atlantic Richfield	9	048825AY9	Deb	05/01/2031	A	7.00	6.92	6.93	6.65	6.39	6.32	6.32	6.31	5.80	6.05	5.84	5.71	6.35%	5.87%	
Atlantic Richfield	9.125	048825AZ6	Deb	08/01/2031	A	6.96	6.88	6.89	6.61	6.35	6.28	6.28	6.26	5.75	5.98	5.86	5.66	6.31%	5.83%	
Atlantic Richfield	8.25	048825BA0	Deb	02/01/2022	A	5.43	5.46	5.49	5.19	4.87	4.67	4.67	4.24	3.95	4.12	4.05	3.92	4.67%	4.03%	
Atlantic Richfield	8.75	048825BB8	Deb	03/01/2032	A	7.00	6.67	6.68	6.40	6.14	6.07	6.07	5.86	5.35	5.54	5.42	5.26	6.04%	5.41%	
Burlington Resources Inc.	9.125	122014AE3	Deb	10/01/2021	A	4.63	4.71	4.72	4.67	4.38	4.27	4.27	3.56	3.34	3.49	3.56	3.57	4.10%	3.54%	
Burlington Resources Inc.	8.2	122014AH6	Deb	03/15/2025	A	5.58	5.66	5.72	5.67	5.38	5.25	5.25	4.78	4.56	4.44	5.00	4.87	5.18%	4.77%	
Burlington Resources Inc.	6.875	122014AJ2	Deb	02/15/2026	A	5.55	5.81	5.87	5.82	5.53	5.17	5.17	4.70	4.48	4.83	4.94	4.77	5.22%	4.85%	
Burlington Resources Inc.	7.375	122014AL7	Deb	03/01/2029	A	5.80	5.77	5.81	5.78	5.55	5.55	5.55	4.79	4.35	4.27	4.49	4.50	4.96%	4.42%	
Burlington Resources Fin	7.2	12201PAB2	Gtd Nt	8/15/2031	A	5.53	5.46	5.48	5.41	5.22	5.22	5.22	4.81	4.37	4.46	4.59	4.54	5.03%	4.53%	
Conoco Inc	6.95	208251AEB	Nts	04/15/2029	A	5.13	5.18	5.26	5.23	4.99	4.93	4.93	4.61	4.13	3.98	4.24	4.01	4.72%	4.08%	
ConocoPhillips	4.75	20825CAE4	Nts	10/15/2012	A	0.69	0.78	0.81	0.71	0.75	0.53	0.53	0.63	0.85	0.78	0.92	0.95	0.74%	0.88%	
ConocoPhillips	5.9	20825CAE1	Nts	10/15/2032	A	5.32	5.24	5.31	5.07	5.07	5.07	5.07	4.60	4.25	4.42	4.30	4.21	4.85%	4.31%	
Conoco Funding	7.25	20825UAC8	Sr Nt	10/15/2031	A	5.38	5.41	5.43	5.42	5.17	5.17	5.17	4.79	4.35	4.27	4.49	4.50	4.96%	4.42%	
Louisiana Land/Exp	7.625	546268AF0	Deb	04/15/2013	A	2.03	2.20	2.23	2.10	2.24	1.90	2.06	2.41	2.88	0.02	0.02	1.20	1.77%	0.41%	
Louisiana Land/Exp	7.65	546268AG8	Deb	12/01/2023	A	4.83	4.91	5.64	5.59	4.88	4.90	4.54	4.17	4.10	4.03	4.10	3.91	4.63%	4.01%	
Michigan Consol Gas	8.25	594457BD4	1st	05/01/2014	A	2.72	2.93	3.04	2.95	2.70	2.85	2.76	2.67	2.95	3.05	1.01	2.13	2.65%	2.06%	
Michigan Consol Gas	7.06	594457BH5	Sec M-T Nts 'B'	05/01/2012	A	1.84	1.99	2.04	1.95	2.19	2.65	2.96	3.44	3.94	4.33		1.85	2.65%	3.09%	
Michigan Consol Gas	5.7	594457BT9	Sr Nts	03/15/2033	A	5.82	5.64	5.71	5.68	5.42	5.56	5.32	4.93	4.32	4.42	4.48	4.31	5.13%	4.40%	
Michigan Consol Gas	5	594457BU6	Sr Nts' E'	10/01/2019	A	4.73	4.41	4.49	4.44	3.95	4.07	3.73	3.29	3.12	3.22	3.15	2.97	3.80%	3.11%	
Northern IllinoisGas	6.58	665228BQ4	1st	02/15/2028	A	6.03	5.96	5.98	5.96	5.69	5.86	5.61	5.07	4.54	4.73	4.60	4.44	5.37%	4.59%	
Northern IllinoisGas	7.2	665228BV3	1st	05/15/2016	A	3.17	3.31	3.30	3.21	2.76	2.85	2.54	2.29	2.41	2.49	2.51	1.94	2.73%	2.31%	
Occidental Petroleum Corp.	9.25	674599BE4	Sr Deb	08/01/2019	A	4.31	4.34	4.33	4.28	3.83	3.98	3.66	3.22	3.09	3.95	3.61	3.52	3.84%	3.69%	
Occidental Petroleum Corp.	7.2	674599BM6	Sr Deb	04/01/2022	A	5.94	5.84	5.84	5.80							4.93	4.50	4.47	5.33%	4.63%
Occidental Petroleum Corp.	8.45	674599BT1	Sr Nts	02/15/2029	A	6.17	6.09	6.09	6.04	5.81	5.95	5.71	5.20	4.66	5.06	4.63	4.59	5.50%	4.76%	
Occidental Petro Corp Med Term	8.75	67461FED5	N Tranche # Tr 00	1/15/2023	A	6.08	6.11	6.14	6.09	5.78	5.90	5.56	4.93	4.73	4.90	4.82	4.67	5.48%	4.80%	
Occidental Petro	8.75	67461FED5	Sr Nts	01/15/2023	A	6.08	6.11	6.14	6.09	5.78	5.90	5.56	4.93	4.73	4.90	4.82	4.67	5.48%	4.80%	
Phillips Petroleum	6.65	718507BH8	Deb	07/15/2018	A	3.67	3.69	3.89	3.79	3.27	3.43	3.11	2.95	2.95	2.93	3.02	2.52	3.27%	2.82%	
Phillips Petroleum	7	718507BK1	Deb	03/30/2029	A	5.35	5.32	5.36	5.33	5.10	5.29	5.10	4.76	4.32	4.10	4.56	4.41	4.92%	4.36%	
Piedmont Natural Gas Co., Inc.	5	720186AD7	Nts' E'	12/19/2013	A	2.46	2.63	2.71	2.63	2.66	2.51	1.00	1.02	1.27	1.60	1.57	1.56	1.97%	1.58%	
Piedmont Natural Gas Co., Inc.	6	720186AE5	Nts' E'	12/19/2033	A	6.12	6.04	6.07	6.04	5.76	5.93	5.37	4.86	4.34	4.97	4.55	4.51	5.38%	4.68%	
Piedmont Natural Gas	7.95	72018QAG6	M-T Nts' C'	09/14/2029	A	6.29	6.20	6.21	6.17	5.86	6.03	5.59	5.10	4.59	4.83	4.68	4.51	5.51%	4.67%	
Western Atlas Inc	8.55	957674AD6	Deb	06/15/2024	A	5.07	5.10	5.15	5.10	4.73	4.90	4.56	4.10	4.04	3.90	4.27	3.82	4.56%	4.00%	
ANR Pipeline	7.38	001814AQ5	Deb	02/15/2024	A-	5.36	5.39	5.21	5.01	4.76	4.89	4.89	4.24	4.35	4.51	4.49	4.17	4.77%	4.39%	
ANR Pipeline	9.62	001814AR3	Deb	11/01/2021	A-	4.81	4.96	4.89	4.84	4.52	4.27	4.27	4.13	3.95	3.63	3.59	3.82	4.31%	3.68%	
ANR Pipeline	7	001814AS1	Deb	06/01/2025	A-	6.77	6.70	6.73	6.70	5.46	5.27	5.27	4.69	4.40	4.65	4.68	4.37	5.47%	4.57%	
Apache Corp.	7.7	037411AJ4	Nts	03/15/2026	A-	4.97	4.91	4.91	4.85	4.75	4.68	4.68	4.10	3.98	4.00	3.89	4.29	4.50%	4.06%	
Apache Corp.	7.95	037411AK1	Nts	04/15/2026	A-	5.16	5.10	5.07												

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
EOG Resources, Inc.	5.88	26875PA9	Sr Nts	09/15/2017	A-	3.55	3.73	3.76	3.71	3.17	2.67	2.52	2.61	2.40	2.30	2.24	2.99%	2.31%		
Enron Oil & Gas	6.65	293562AD6	Nts	04/01/2028	A-	5.97	5.90	5.86	5.83	5.56	5.72	5.37	5.07	4.62	4.49	4.34	4.21	5.25%	4.35%	
KeySpan Corp.	8	49337WAC4	Nts	11/15/2030	A-	6.17	6.10	6.11	5.98	5.66	5.83	5.59	5.10	4.67	4.86	4.68	5.16	5.49%	4.90%	
KeySpan Corp.	4.65	49337WAG5	Nts	04/01/2013	A-	2.32	2.45	2.09	1.91	1.80	1.93	1.96	2.01	2.30	0.35	0.99	1.87	1.83%	1.07%	
KeySpan Corp.	5.88	49337WAH3	Nts	04/01/2033	A-	6.02	5.94	5.96	5.88	5.61	5.76	5.51	5.03	4.61	4.76	4.64	4.46	5.35%	4.62%	
Apache Corp.	7.625		Deb	11/01/2096	A-	6.37	6.30	6.30	6.15	5.98	6.10	5.64	5.51	5.22	5.10	5.27	5.03	5.70%	5.13%	
Atmos Energy Corp.	6.75	049560AA3	Deb	07/15/2028	BBB+	6.07	6.00	6.01	5.98	5.72	5.31	5.31	4.71	4.35	4.72	4.20	4.26	5.22%	4.39%	
Atmos Energy Corp.	5.12	049560AC9	Sr Nts	01/15/2013	BBB+	2.07	2.20	2.24	1.90	1.53	1.38	1.38	0.99	1.26	1.37	1.32	1.53	1.60%	1.41%	
Atmos Energy Corp.	4.95	049560AF2	Sr Nts	10/15/2014	BBB+	2.81	3.02	3.09	2.50	2.16	1.92	1.92	1.57	1.85	1.59	1.51	1.47	2.12%	1.52%	
Atmos Energy Corp.	5.95	049560AG0	Sr Nts	10/15/2034	BBB+	6.27	6.19	6.21	6.18	5.92	5.51	5.51	4.91	4.50	4.87	4.30	4.41	5.40%	4.53%	
Atmos Energy Corp.	6.35	049560AH8	Sr Nts	06/15/2017	BBB+	4.30	4.18	4.21	4.16	3.53	3.09	3.09	2.41	2.59	2.80	2.65	2.68	3.31%	2.71%	
Cascade Natural Gas Corp.	5.25	147339AJ4	Nts	02/01/2035	BBB+	5.68	5.64	5.66	5.60	5.37	5.33	5.33	5.36	5.25	5.49	5.54	5.36	5.47%	5.46%	
Devon Fin Corp	7.95	251799AA0	Sr Deb	04/15/2032	BBB+	5.55	5.52	5.56	5.46	5.17	5.51	5.25	5.10	4.73	4.59	5.00	4.64	5.17%	4.74%	
ENSCO International Inc.	7.2	26874QAB6	Deb	11/15/2027	BBB+	6.58	6.50	6.52	6.23	5.93	6.10	5.83	5.49	4.98	5.17	6.19	6.25	5.98%	5.87%	
OceanEnergy	8.25	674812AK8	Sr Nts 'B'	07/01/2018	BBB+	4.17	4.23	4.23	4.14	3.61	3.73	3.42	3.22	3.35	3.51	3.61	3.17	3.70%	3.43%	
Southwest Gas Corp.	8	844895AL6	Deb	08/01/2026	BBB+	6.64	6.53	6.47	6.35	5.51	5.64	5.38	4.76	4.59	4.85	4.51	4.42	5.47%	4.59%	
Buckeye Partners, L.P.	5.12	118230AE1		07/01/2017	BBB	4.24	4.34	4.37	4.29	3.81	3.51	3.51	3.13	3.27	3.57	3.37	3.31	3.73%	3.42%	
Enbridge Energy Partners, L.P.	4.75	29250RAC0	Sr Nts 'B'	06/01/2013	BBB	2.12	2.25	1.99	1.91	1.46	1.58	2.22	2.29	2.50	2.20	1.47	2.66	2.05%	2.11%	
Enbridge Energy Partners, L.P.	5.95	29250RAD8	Sr Nts 'B'	06/01/2033	BBB	6.42	6.04	6.06	6.03	5.76	5.93	5.56	5.42	5.10	5.35	4.95	4.86	5.62%	5.05%	
Enbridge Energy Partners, L.P.	5.88	29250RAH8	Nt	12/15/2016	BBB	3.66	3.59	3.78	3.51	3.26	3.27	2.29	2.12	2.78	2.75	2.60	2.72	3.03%	2.69%	
Energen Corp.	5	29265NAQ1	Nts	10/01/2013	BBB	3.30	3.50	3.67	3.60	2.80	2.95	2.93	2.87	3.31	3.19	3.16	3.16	3.20%	3.17%	
Equitable Resources, Inc.	7.75	294549AE0	Deb	07/15/2026	BBB	6.83	6.81	6.84	6.54	6.17	6.30	5.95	5.71	5.69	5.83	5.62	6.18%	5.76%		
Kinder Morgan Energy Partners, L.P.	7.4	494550AJ5	Nts	03/15/2031	BBB	6.38	6.34	6.32	6.18	5.95	6.17	5.90	5.93	5.69	5.75	5.71	6.01%	5.74%		
Kinder Morgan Energy Partners, L.P.	7.125	494550AK2	Nts	03/15/2012	BBB	1.30	1.45	1.11	0.75	2.04	2.62	3.16	2.78	4.45	1.70	1.91	1.58	2.07%	1.73%	
Kinder Morgan Energy Partners, L.P.	7.75	494550AL0	Nts	03/15/2032	BBB	6.40	6.33	6.32	6.14	5.93	6.15	5.86	5.93	5.69	5.82	5.78	5.73	6.01%	5.78%	
Kinder Morgan Energy Partners, L.P.	7.3	494550AQ9	Sr Nts	08/15/2033	BBB	6.30	6.38	6.32	6.16	5.92	6.12	5.86	5.97	5.76	5.92	5.93	5.91	6.05%	5.92%	
Kinder Morgan Energy Partners, L.P.	5	494550AR7	Sr Nts	12/15/2013	BBB	1.61	1.80	1.89	1.73	1.93	2.07	0.80	1.11	1.34	1.76	1.78	1.86	1.64%	1.80%	
Kinder Morgan Energy Partners, L.P.	6	494550AU0	Sr Nt	2/1/2017	BBB	3.87	3.95	3.78	3.68	3.34	3.59	3.18	2.78	3.10	3.18	3.32	3.17	3.41%	3.22%	
Kinder Morgan Energy Partners, L.P.	6.5	494550AV8	Sr Nt	2/1/2037	BBB	6.32	6.32	6.26	6.15	5.88	6.17	5.76	5.98	5.95	5.85	5.88	5.73	6.02%	5.82%	
Kinder Morgan Energy Partners, L.P.	6.95	494550AW6	Sr Nt	1/15/2038	BBB	6.35	6.37	6.37	6.14	5.93	6.27	5.83	6.08	6.05	5.85	5.85	5.96	6.09%	5.89%	
Lakehead Pipe Line Co	7	511546AA1	Sr Nts	10/01/2018	BBB	4.68	4.79	4.82	4.72	4.39	3.98	3.78	3.56	3.73	3.76	3.67	4.18%	3.72%		
Lakehead Pipe Line Co	7.12	511546AB9	Sr Nts	10/01/2028	BBB	6.52	6.45	6.46	6.43	5.64	5.81	5.56	5.31	4.78	4.90	4.78	4.67	5.61%	4.78%	
Lakehead Pipe Line Co	7.9	511546AE3	Sr Nts	11/21/2012	BBB	2.06	2.21	2.22	2.13	2.39	0.02	0.16	0.60	1.15	1.58	2.08	2.12	1.64%	1.93%	
Marathon Oil Corp.	6.8	565849AB2	Nts	03/15/2032	BBB	5.73	5.65	5.79	5.77	5.54	5.78	5.51	5.07	5.29	5.07	5.20	5.04	5.45%	5.10%	
Murphy Oil Corp.	7.05	626717AA0	Nts	05/01/2029	BBB	6.08	6.13	5.92	5.88	5.59	5.73	5.49	5.54	5.01	5.42	5.00	5.11	5.58%	5.18%	
Murphy Oil Corp.	6.38	626717AB8	Nts	05/01/2012	BBB	1.81	1.50	1.51	1.51	1.72	2.17	2.59	3.10	3.52	1.61	1.69	1.70	2.04%	1.67%	
National Fuel Gas Co.	5.25	636180BE0	Nts	03/01/2013	BBB	2.33	2.44	2.30	1.99	1.96	2.18	2.24	2.33	0.25	2.06	2.02	1.68	1.98%	1.92%	
ONEOK, Inc.	6.5	682680AA1	Sr InsurNts	09/30/2028	BBB	6.78	6.56	6.61	6.58	6.47	6.48	6.47	6.49	6.49	6.57	6.49	6.54%	6.52%		
ONEOK, Inc.	6.88	682680AB9	Deb	09/30/2028	BBB	6.37	6.35	6.26	6.23	5.93	6.10	5.86	5.71	5.42	5.55	5.23	5.26	5.86%	5.35%	
ONEOK, Inc.	5.2	682680AM5	Nts	06/15/2015	BBB	3.30	3.29	3.31	3.26	2.56	2.68	2.37	2.44	2.61	2.30	2.20	2.29	2.72%	2.26%	
ONEOK, Inc.	6	682680AN3	Nts	06/15/2035	BBB	6.32	6.29	6.21	6.18	5.90	6.08	5.81	5.67	5.44	5.27	4.95	5.46	5.80%	5.23%	
ONEOK Partners, L.P.	5.9	68268NA1	Gtd Sr Nt	4/1/2012	BBB	1.34	1.39	1.14	0.89	1.56	2.08	2.37	3.10	3.62	1.35	1.49	1.81%	1.40%		
ONEOK Partners, L.P.	6.15	68268NAB9	Gtd Sr Nt	10/01/2016	BBB	3.30	3.54	3.54	3.49	2.79	2.88	2.46	2.80	3.17	2.85	2.85	2.79	3.04%	2.83%	
ONEOK Partners, L.P.	6.65	68268NACT	Gtd Sr Nt	10/01/2036	BBB	6.20	6.10	6.16	6.04	5.75	5.98	5.59	5.71	5.44	5.37	5.20	5.31	5.74%	5.29%	
USX Corp.	9.375	920905AK4	Deb	02/15/2012	BBB	1.45	1.53	1.35	1.24	3.45	4.18	4.82						1.99	2.50%	1.99%
USX Corp.	9.375	920905AL2	Deb	05/15/2022	BBB	5.43	6.15	6.18	6.14	5.76	5.92	5.59	5.12	5.10	5.17	5.10	4.79	5.54%	5.02%	
USX Corp.	9.125	920905AM0	Deb	01/15/2013	BBB	2.83	2.90	2.87	2.71	3.62	3.90	4.07	0.12	0.74	1.23	1.76	2.47	2.44%	1.82%	
USX Corp.	8.5	920905AN8	Deb	03/01/2023	BBB	5.62	5.65	5.67	5.63	5.31	5.44	5.11	4.66	4.32	4.49	4.54	4.29	5.06%	4.44%	
USX Corp.	8.125	920905AQ1	Deb	07/15/2023	BBB	5.62	5.65	5.68	5.64	5.25	5.39	5.05	4.59	4.46	4.64	4.42	4.29	5.06%	4.45%	
Valero Energy Corp. (New)	8.75	91913YAB6	Nts	06/15/2030	BBB	7.53	7.13	7.15	6.80	6.39	6.59	6.34	6.47	6.15	6.26	6.06	6.02	6.57%	6.11%	
Valero Energy Corp. (New)	6.875	91913YAD2	Nts	04/15/2012	BBB	1.10	1.45	1.25	1.23	1.88	2.21	2.65	3.26	3.77	1.22	1.10	1.26	1.87%	1.19%	
Valero Energy Corp. (New)	7.5	91913YAE0	Nts	04/15/2012	BBB	6.51	6.50	6.59	6.38	6.10	6.47	5.98	6.42	6.15	5.82	5.93	6.03	6.24%	5.93%	
Valero Energy Corp. (New)	4.75	91913YAG5	Nts	06/15/2013	BBB	1.92	1.82	1.87	1.74	1.38	1.51	1.55	1.65	2.01	1.53	1.49	1.49	1.66%	1.50%	
Valero Energy Corp. (New)	4.75	91913YAK6	Sr Nts	04/01/2014	BBB	2.89	3.04	2.65	2.54	2.27	2.39	2.23	2.19	2.35	1.86	1.83	1.83	2.34%	1.84%	
Valero Energy Corp. (New)	6.62	91913YAL4	Nts	06/15/2037	BBB	6.42	6.45	6.57	6.38	6.08	6.30	5.98	6.05	6.05	5.89	6.10	6.06	6.19%	6.02%	
Valero Energy Corp. (New)	6.12	91913YAM2	Nts	06/15/2017	BBB	4.23	4.13	4.13	4.06	3.49	3.63	3.17	3.61	3.98	3.70	3.62	3.74	3.79%	3.69%	
Anadarko Petroleum Corp.	7.25	032511AH0	Deb	03/15/2025	BBB-	6.22	5.98	6.1												

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Boardwalk Pipelines Lp	5.88	096630AA6	Sr Nt	11/15/2016	BBB-	3.82	3.94	4.00	3.89	3.26	3.14	3.14	3.21	3.19	3.43	3.55	3.09	3.47%	3.36%
Energy Transfer Partners, L.P.	5.95	29273RAB5	Sr Nt	2/1/2015	BBB-	3.11	3.18	3.25	3.08	2.78	3.06	2.78	2.16	3.35	3.30	3.28	3.17	3.04%	3.25%
Energy Transfer Partners, L.P.	5.65	29273RAD1	Sr Nt	8/1/2012	BBB-	1.75	1.86	2.01	1.71	0.90	0.84	1.11	1.69	2.50	1.60	1.87	1.91	1.65%	1.79%
Energy Transfer Partners, L.P.	6.12	29273RAE9	Sr Nt	2/15/2017	BBB-	4.10	4.01	3.75	3.90	3.59	3.95	3.73	3.59	4.12	4.00	4.13	3.99	3.91%	4.04%
Energy Transfer Partners, L.P.	6.62	29273RAF6	Sr Nt	10/15/2036	BBB-	6.15	6.16	6.26	6.13	5.95	6.37	6.10	6.32	6.39	6.11	6.04	6.21	6.18%	6.12%
Enterprise Products Oper	6.375	293791AD1	Sr Nts 'B'	02/01/2013	BBB-	1.60	1.77	1.83	1.70	2.27	2.57	2.71	0.02	0.47	0.62	1.25	1.99	1.57%	1.29%
Enterprise Products Oper	5.6	293791AN9	Sr Nts 'B'	10/15/2014	BBB-	2.36	2.44	2.48	2.30	1.61	1.77	1.63	2.19	2.30	2.05	2.17	2.05	2.11%	2.09%
Enterprise Products Oper	6.65	293791AP4	Sr Nts 'B'	10/15/2034	BBB-	6.10	6.07	6.12	6.02	5.78	5.95	5.61	5.69	5.47	5.07	5.51	5.27	5.72%	5.28%
Enterprise Products Oper	5	293791AR0	Sr Nts 'B'	03/01/2015	BBB-	2.82	3.07	3.06	2.92	2.51	2.63	2.22	2.21	2.00	1.90	1.93	2.07	2.45%	1.97%
Enterprise Products Oper	5.75	293791AT6	Sr Nts 'B'	03/01/2035	BBB-	6.03	6.08	6.09	6.01	5.77	5.98	5.64	5.71	5.44	5.12	5.54	5.27	5.72%	5.31%
Kerr-McGee Corp.	7.125	492386AK3	Deb	10/15/2027	BBB-	6.67	6.16	6.26	6.04	5.83	6.05	5.69	5.66	5.66	5.44	5.64	5.34	5.87%	5.47%
Kerr-McGee Corp.	7.875	492386AT4	Nts	09/15/2031	BBB-	6.75	6.44	6.60	6.37	5.88	6.10	5.81	6.05	5.88	5.37	5.88	5.71	6.07%	5.65%
Kerr-McGee Corp.	6.95	492386AU1	Nts	07/01/2024	BBB-	5.97	5.64	5.78	5.69	5.27	5.42	4.95	5.07	5.15	4.76	5.00	4.87	5.30%	4.88%
Northwest Pipeline	7.12	667748AF4	Deb	12/01/2025	BBB-	5.43	5.41	5.44	4.88	5.20	4.81	4.59	4.44	4.49	4.61	4.52	4.92%	4.54%	
Panhandle East'n P.L.	7	667748AM9	Sr Nts	06/15/2016	BBB-	3.15	3.34	3.21	3.16	2.59	2.83	2.51	2.66	3.00	2.98	3.07	2.64	2.93%	2.90%
Pioneer Natural Resources Co.	7.2	723787AB3	Sr Nts	01/15/2028	BBB-	6.92	6.60	6.77	6.59	6.66	6.72	6.47	6.59	6.52	6.63	5.92	5.83	6.52%	6.13%
Pioneer Natural Resources Co.	6.88	723787AF4	Sr Nts	05/01/2018	BBB-	5.58	5.41	5.57	5.44	5.20	5.47	5.15	5.42	5.59	5.50	4.61	4.47	5.28%	4.86%
Pioneer Natural Resources Co.	6.65	723787AG2	Sr Nts	03/15/2017	BBB-	5.30	5.08	5.16	4.91	4.78	4.90	4.68	5.10	5.25	4.90	4.30	4.34	4.89%	4.51%
Plains All Amer/PAA Fin	5.25	72650RAJ1	Sr Nts	06/15/2015	BBB-	4.17	3.44	3.50	3.45	2.56	2.88	2.45	2.44	2.63	2.74	3.02	2.43	2.98%	2.73%
Plains All Amer Pipeline L P	6.7	72650RAM4	Sr Nt	5/15/2036	BBB-	6.40	6.21	6.17	6.12	5.88	6.19	5.71	5.64	5.66	5.59	5.78	5.31	5.89%	5.56%
Southern Union Co.	7.6	844030AA4	Sr Nts	02/01/2024	BBB-	6.63	6.41	6.44	6.14	5.71	5.76	5.42	5.15	5.47	5.70	5.36	5.57	5.81%	5.54%
Southern Union Co.	8.25	844030AC0	Sr Nts	11/15/2029	BBB-	7.47	6.95	6.96	6.78	6.27	6.34	6.20	6.10	6.54	6.77	6.20	6.46	6.59%	6.48%
Transcont'l Gas PipeLine	7.08	893570BL4	Deb	07/15/2026	BBB-	6.53	6.56	6.59	6.54	6.20	6.32	5.98	5.71	5.59	5.59	5.59	5.37	6.05%	5.52%
Transcont'l Gas PipeLine	7.25	893570BM2	Deb	12/01/2026	BBB-	5.68	5.71	5.74	5.69	5.37	5.44	5.10	5.44	5.29	4.81	4.81	4.62	5.31%	4.75%
Transcont'l Gas PipeLine	8.88	893570BT7	Sr Nts 'B'	07/15/2012	BBB-	1.34	1.45	1.44	1.29	0.33	0.84	1.30	2.19	2.91	3.33	4.06	1.40	1.82%	2.93%
Transcont'l Gas PipeLine	6.4	893570BW0	Sr Nt	4/15/2016	BBB-	3.15	3.24	3.16	3.11	2.61	2.93	2.62	2.66	2.88	2.12	2.34	2.49	2.78%	2.32%
Union Pacific Resources Group	7.5	907834A81	Deb	10/15/2026	BBB-	6.56	6.14	6.18	5.88	5.29	5.39	5.07	5.07	4.81	5.05	5.12	5.47%	4.99%	
Union Pacific Resources Group	7.05	907834AF2	Deb	05/15/2018	BBB-	5.53	5.30	5.39	5.12	4.56	4.84	4.23	4.10	4.44	4.61	4.90	4.45	4.77%	4.65%
Union Pacific Resources Group	7.15	907834AGO	Deb	05/15/2028	BBB-	7.03	6.64	6.58	6.40	5.98	6.00	5.73	5.93	5.93	5.47	5.69	5.66	6.09%	5.61%
Williams Ptns L P	7.25	96950HAD2	Sr Nt	2/1/2017	BBB-	4.00	4.04	3.91	3.81	3.44	3.85	3.38	2.90	3.70	3.12	3.39	3.24	3.57%	3.25%
Anadarko Petroleum Corp.	7.73	165167BS5	Deb	09/15/2096	BBB-	7.78	7.64	7.22	6.98	7.15	6.82	6.93	6.82	6.42	6.66	6.37	6.98%	6.48%	
Anadarko Petroleum Corp.	7.25	165167BU0	Deb	11/15/2096	BBB-	7.99	7.74	7.32	6.98	7.17	6.84	6.83	6.71	6.37	6.61	6.32	6.99%	6.43%	
Union Pacific Resources Group	7.5	165167BY2	Sr Nts	01/15/2020	BB+	6.10	5.98	5.77	5.51	5.99	6.23	6.23	6.29	5.87	5.55	6.28	5.85	5.97%	5.89%
Chesapeake Energy Corp.	6.5	165167CC9	Sr Nt	12/15/2018	BB+	6.19	5.60	5.47	5.24	5.41	5.90	5.90	6.21	5.80	5.37	5.88	5.41	5.70%	5.55%
Clarendex Energy Co.	7.12	171798AA9	Sr Nts	05/01/2017	BB+	6.05	6.04	6.03	6.02	5.95	6.19	6.19	6.79	6.68	6.04	6.45	6.17	6.22%	6.22%
Newfield Exploration Co.	6.62	651290AH1	Sr Sub Nts	09/01/2014	BB+	5.91	5.90	5.88	5.95	5.88	6.06	6.06	6.34	6.44	6.18	6.41	6.15	6.10%	6.25%
Newfield Exploration Co.	6.62	651290AJ7	Sr Sub Nts	04/15/2016	BB+	5.83	5.87	5.87	5.86	5.83	5.88	5.88	6.03	6.39	5.88	5.96	5.82	5.92%	5.89%
Sun Co.	9	866762AK3	Deb	11/01/2024	BB+	6.82	6.85	6.88	6.29	5.88	6.00	5.64	5.17	4.99	5.15	5.56	5.36	5.88%	5.36%
Sunoco, Inc.	5.75	86764PAD1	Nts	01/15/2017	BB+	4.71	4.64	4.46	4.37	4.03	4.27	4.81	5.98	6.09	5.74	5.75	5.63	5.04%	5.71%
Tesoro Petroleum Corp.	6.25	881609AQ4	Sr Sub Nts	11/01/2012	BB+	3.42	3.00	2.68	2.67	1.18	1.18	1.18	2.16	2.91	1.72	2.11	3.18	2.28%	2.34%
Tesoro Petroleum Corp.	6.62	881609AS0	Sr Sub Nts	11/01/2015	BB+	5.91	5.87	5.89	5.76	5.76	5.98	5.90	6.05	6.44	6.05	6.18	6.10	5.99%	6.11%
Williams Companies, Inc. (The)	10.25	969457AH3	Deb	07/15/2020	BB+	8.08	8.08											8.08%	
Williams Companies, Inc. (The)	9.375	969457AK6	Deb	11/15/2021	BB+	8.12	8.12											8.12%	
Williams Companies, Inc. (The)	8.875	969457AM2	Deb	09/15/2012	BB+	6.56	6.06											6.31%	
Williams Companies, Inc. (The)	7.625	969457AW0	Nts	07/15/2019	BB+	5.63	4.81	4.84	4.69	4.20	4.93	4.66	4.49	5.31	5.15	4.01	4.17	4.74%	4.44%
Williams Companies, Inc. (The)	7.5	969457B85	Deb	01/15/2031	BB+	6.57	6.00	6.01	5.88	5.54	6.22	5.90	6.00	5.98	5.77	5.30	5.61	5.90%	5.56%
Williams Companies, Inc. (The)	7.75	969457BD1	Nts	06/15/2031	BB+	6.67	6.10	6.11	5.98	5.54	6.27	5.95	6.03	6.00	5.77	5.40	5.66	5.96%	5.61%
Williams Companies, Inc. (The)	7.875	969457BG4	Nts	09/01/2021	BB+	5.48	4.81	4.84	4.69	4.12	4.81	4.51	4.60	5.42	4.60	4.31	4.85	4.75%	4.59%
Williams Companies, Inc. (The)	8.125	969457BK5	Nts	03/15/2012	BB+	2.74	2.01	1.99	1.84	2.96	3.74	4.16	4.84	5.65	2.55	0.49	0.80	2.81%	1.28%
Williams Companies, Inc. (The)	8.75	969457BM1	Nts	03/15/2032	BB+	6.82	6.20	6.26	6.13	5.61	6.37	6.08	6.17	6.12	5.86	5.50	6.06	6.10%	5.81%
Colorado Interstate Gas	6.85	196522AE6	Sr Deb	06/15/2037	BB	6.62	6.30	6.21	5.82	5.91	5.91	5.61	5.61	5.70	6.08	6.25	6.06	6.06%	6.13%
Colorado Interstate Gas	5.95	196522AH9	Sr Nts	03/15/2015	BB	3.40	3.49	3.16	3.11	2.69	2.44	2.44	2.51	2.59	3.00	3.01	3.34	2.93%	3.12%
Ei Paso Natural Gas	8.62	283695AZ7	Deb	01/15/2022	BB	5.78	5.41	5.39	5.29	4.81	5.07	4.81	4.39	4.98	4.81	4.90	5.17	5.07%	4.96%
Ei Paso Natural Gas	7.5	283695BE3	Deb	11/15/2026	BB	6.42	6.05	6.06	6.13	5.47	5.78	5.49	5.39	5.73	5.66	5.73	5.25	5.76%	5.55%
Ei Paso Natural Gas	8.38	283695BK9	Sr Sub Nts	06/15/2032	BB	6.62	6.30	6.26	6.38	5.88	6.10	5.86	5.77	5.76	6.12	6.25	6.06	6.11%	6.14%
KN Energy	6.5	482620AN1	Deb	09/01/2013	BB	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50%	6.50%
KN Energy	6.67	482620AS0	Deb	11/01/2027	BB	9.42	9.34	8.31	8.28	8.04	8.20	7.94	7.59	6.91	7.20	7.20	7.20	7.97%	7.

MONTANA DEPARTMENT OF REVENUE

**Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year**

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Counts of data						247	243	233	235	228	240	235	234	234	234	232	240	265	244

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
AAA's	2.21%	1.85%
AA's	5.10%	4.38%
A's	4.21%	3.65%
BBB's	4.39%	4.07%
BB's	5.64%	5.39%
B's	7.31%	7.34%
CCC's	7.18%	7.24%
D	15.55%	15.30%
NR's	4.61%	4.96%
ALL	4.64%	4.33%
BBB- & Above	4.20%	3.79%
BB- & Above	4.52%	4.11%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Gas Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
20 YR PLUS - BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
XTO Energy Inc.	6.1	98385XAJ5	Sr Nts	04/01/2036	AAA						4.98	4.71	4.27	3.78	3.90	3.76	3.81	4.14%	3.78%	
XTO Energy Inc.	6.75	98385XAM8	Sr Nts	08/01/2037	AAA						4.78	4.58	4.12	3.44	3.81	3.76	3.51	3.97%	3.63%	
Texaco Capital	6.38	98385XAQ8	Sr Nts	08/15/2038	AAA						4.95	4.58	4.03	3.54	3.98	3.81	3.61	4.07%	3.80%	
Texaco Capital	8.025	881655AX9	Gld/Deb	11/15/2031	AA	6.12	5.84	5.88	5.83	5.49	5.66	4.93	4.68	4.37	4.00	4.07	3.91	5.08%	3.99%	
Texaco Capital	8.625	881655AY7	Gld/Deb	04/01/2032	AA	6.13	5.85	5.87	5.83	5.55	5.71	4.98	4.73	4.42	3.98	4.04	3.91	5.08%	3.98%	
Texaco Capital	8	881655B88	Gld/Deb	08/01/2032	AA	6.12	5.83	5.85	5.82	5.51	5.69	4.95	4.71	4.39	4.54	4.81	4.41	5.20%	4.52%	
Texaco Capital	7.5	881655BD2	Gld/Deb	03/01/2043	AA	6.84	6.76	6.80	6.77	6.71	6.78	6.73	6.76	6.83	6.83	6.88	6.91	6.80%	6.87%	
Atlantic Richfield	9	048825AY9	Deb	05/01/2031	A	7.00	6.92	6.93	6.85	6.39	6.32	6.32	6.31	5.80	6.05	5.84	5.71	6.35%	5.87%	
Atlantic Richfield	9.125	048825AZ8	Deb	08/01/2031	A	6.98	6.88	6.89	6.81	6.35	6.28	6.28	6.26	5.75	5.98	5.88	5.66	6.31%	5.83%	
Atlantic Richfield	6.75	048825B88	Deb	03/01/2032	A	7.00	6.87	6.88	6.80	6.14	6.07	6.07	5.86	5.35	5.54	5.42	5.26	6.04%	5.41%	
Burlington Resources Fin	7.2	12201PAZ2	Gld Nt	8/15/2031	A	5.53	5.48	5.48	5.41	5.22	5.22	5.22	4.81	4.37	4.48	4.59	4.54	5.03%	4.53%	
ConocoPhillips	5.9	20825CAF1	Nts	10/15/2032	A	5.32	5.24	5.31	5.31	5.07	5.07	5.07	4.80	4.25	4.42	4.30	4.21	4.85%	4.31%	
Conoco Funding	7.25	20825UAC8	Nts	10/15/2031	A	5.38	5.41	5.43	5.42	5.17	5.17	5.17	4.79	4.35	4.27	4.49	4.50	4.98%	4.42%	
Michigan Consd Gas	5.7	594457BT9	Sr Nts	03/15/2033	A	5.82	5.84	5.71	5.68	5.42	5.58	5.32	4.93	4.32	4.42	4.48	4.31	5.13%	4.40%	
Piedmont Natural Gas Co., Inc.	6	720188AE5	Nts'E	12/19/2033	A	6.12	6.04	6.07	6.04	5.76	5.93	5.37	4.88	4.34	4.97	4.55	4.51	5.38%	4.68%	
Apache Corp.	7.38	037411AM7	Deb	08/15/2047	A-	6.10	6.04	6.08	5.98	5.72	5.70	5.70	5.00	4.54	4.41	4.32	4.41	5.33%	4.38%	
Apache Corp.	6	037411AR8	Nts	01/15/2037	A-	5.68	5.58	5.57	5.49	5.21	5.20	5.20	4.74	4.37	4.22	4.27	4.13	4.97%	4.21%	
KeySpan Corp.	5.68	49337VWAH3	Nts	04/01/2033	A-	6.02	5.94	5.90	5.88	5.61	5.78	5.51	5.03	4.61	4.76	4.84	4.48	5.35%	4.62%	
Apache Corp.	7.625	49337VWAH3	Deb	11/01/2036	A-	6.37	6.30		6.15	5.98	6.10	5.84	5.51	5.22	5.10	5.27	5.03	5.70%	5.13%	
Atmos Energy Corp.	5.95	049560AG0	Sr Nts	10/15/2034	BBB+	6.27	6.19	6.21	6.18	5.92	5.51	5.51	4.91	4.50	4.87	4.30	4.41	5.40%	4.53%	
Cascade Natural Gas Corp.	5.25	147339AJ4	Nts	02/01/2035	BBB+	5.68	5.64	5.66	5.60	5.37	5.33	5.33	5.36	5.25	5.49	5.54	5.36	5.47%	5.46%	
Devon Fin Corp	7.95	251790AA0	Sr Deb	04/15/2032	BBB+	5.55	5.52	5.56	5.48	5.17	5.51	5.25	5.10	4.73	4.59	5.00	4.64	5.17%	4.74%	
Enbridge Energy Partners, L.P.	5.95	29250RAD8	Sr Nts' B'	06/01/2033	BBB	6.42	6.04	6.05	6.03	5.76	5.93	5.56	5.42	5.10	5.35	4.95	4.86	5.62%	5.05%	
Kinder Morgan Energy Partners, L.P.	7.4	494550AJ5	Nts	03/15/2031	BBB	6.38	6.34	6.32	6.18	5.95	6.17	5.90	5.93	5.69	5.75	5.78	5.71	6.01%	5.74%	
Kinder Morgan Energy Partners, L.P.	7.75	494550AL0	Nts	03/15/2032	BBB	6.40	6.33	6.32	6.14	5.93	6.15	5.88	5.93	5.69	5.82	5.78	5.73	6.01%	5.78%	
Kinder Morgan Energy Partners, L.P.	7.3	494550AQ9	Sr Nts	06/15/2033	BBB	6.30	6.38	6.32	6.18	5.92	6.12	5.88	5.97	5.76	5.92	5.93	5.91	6.05%	5.92%	
Kinder Morgan Energy Partners, L.P.	6.5	494550AV8	Sr Nt	2/1/2037	BBB	6.32	6.32	6.26	6.15	5.88	6.17	5.78	5.98	5.95	5.85	5.88	5.73	6.02%	5.82%	
Marathon Oil Corp.	6.95	494550AW6	Sr Nt	1/15/2038	BBB	6.35	6.37	6.37	6.14	5.93	6.27	5.83	6.08	5.85	5.85	5.98	5.90	6.09%	5.89%	
ONEOK, Inc.	6.8	565849AB2	Nts	03/15/2032	BBB	5.73	5.65	5.79	5.77	5.54	5.78	5.51	5.07	5.29	5.04	5.45%	5.10%			
ONEOK Partners, L.P.	6	582680AN3	Nts	06/15/2035	BBB	6.32	6.29	6.21	6.18	5.90	6.08	5.81	5.67	5.44	5.27	4.95	5.46	5.80%	5.23%	
Valero Energy Corp. (New)	6.65	68268NAC7	Gld Sr Nt	10/12/2038	BBB	6.20	6.10	6.16	6.04	5.75	5.98	5.59	5.71	5.44	5.37	5.20	5.31	5.74%	5.29%	
Valero Energy Corp. (New)	7.5	91913YAL4	Nts	04/15/2032	BBB	6.51	6.50	5.98	6.38	6.10	6.47	5.98	6.42	6.15	6.82	5.93	6.03	6.24%	5.93%	
Anadarko Petroleum Corp.	6.45	032511AY3	Sr Nts	09/15/2036	BBB	6.64	6.38	6.49	6.31	5.98	5.99	5.99	6.31	6.07	5.38	5.83	5.41	6.05%	5.47%	
Energy Transfer Partners, L.P.	6.62	29273RAF8	Sr Nt	10/15/2036	BBB	6.15	6.16	6.26	6.13	5.95	6.37	6.10	6.32	6.39	6.11	6.04	6.21	6.16%	6.12%	
Enterprise Products Oper	6.65	293791AP4	Sr Nts'B	10/15/2034	BBB	6.10	6.07	6.12	6.02	5.78	5.95	5.81	5.61	5.47	5.07	5.51	5.27	5.72%	5.26%	
Enterprise Products Oper	5.75	293791AT6	Sr Nts'B	03/01/2035	BBB	6.03	6.08	6.09	6.01	5.77	5.98	5.84	5.71	5.44	5.27	5.54	5.27	5.72%	5.31%	
Kem-McGee Corp.	7.075	492388AT4	Nts	09/15/2031	BBB	6.75	6.44	6.60	6.37	5.88	6.10	5.81	6.05	5.88	5.37	5.88	5.71	6.07%	5.85%	
Plains All American Pipeline L P	6.7	7250RAM4	Sr Nt	5/15/2036	BBB	6.40	6.21	6.17	6.12	5.88	6.19	5.71	5.84	5.66	5.59	5.78	5.31	5.89%	5.58%	
Anadarko Petroleum Corp.	7.73	7250RAM4	Deb	09/15/2036	BBB	7.78	7.54		7.22	6.98	7.15	6.82	6.93	6.82	6.42	6.68	6.37	6.88%	6.48%	
Anadarko Petroleum Corp.	7.25	7250RAM4	Deb	11/15/2036	BBB	7.99	7.74		7.32	6.98	7.17	6.84	6.83	6.71	6.37	6.81	6.32	6.99%	6.43%	
Union Pacific Resources Group	7.5	7250RAM4	Deb	11/01/2036	BBB	8.05	7.78		7.25	6.93	7.13	6.78	6.82	6.71	6.37	6.81	6.32	6.98%	6.43%	
Williams Companies, Inc. (The)	7.5	989457B85	Deb	01/15/2031	BBB+	6.57	6.00	6.01	5.88	5.54	6.22	5.90	6.00	5.98	5.77	5.30	5.61	5.90%	5.58%	
Williams Companies, Inc. (The)	7.75	989457BD1	Nts	06/15/2031	BBB+	6.67	6.10	6.11	5.98	5.54	6.27	5.95	6.03	6.00	5.77	5.40	5.66	5.98%	5.81%	
Williams Companies, Inc. (The)	8.75	989457BM1	Nts	03/15/2032	BBB+	6.82	6.20	6.26	6.13	5.81	6.37	6.08	6.17	6.12	5.88	5.50	6.06	6.10%	5.81%	
Colorado Interstate Gas	8.65	19852A2E6	Sr Deb	06/15/2037	BB	6.62	6.30	6.21	6.23	5.82	5.91	5.91	5.61	5.70	6.06	6.25	6.06	6.08%	6.13%	
El Paso Natural Gas	8.38	283695BK9	Sr Sub Nts	06/15/2032	BB	6.62	6.30	6.26	6.38	5.88	6.10	5.86	5.77	5.76	6.12	6.25	6.06	6.11%	6.14%	
Southern Natural Gas	7.35	843452AY9	Sr Nts	02/15/2031	BB	6.62	6.20	6.16	6.08	5.61	5.93	5.69	5.49	5.83	5.81	5.78	5.81	5.93%	5.80%	
Tennessee GasPipeline	8.62	880451AU3	Deb	04/01/2037	BB	6.62	6.25	6.21	6.18	5.81	6.03	5.71	5.88	5.62	5.56	5.71	5.93	5.90	5.92%	5.87%
Tennessee GasPipeline	8.38	880451AW9	Nts	06/15/2032	BB	6.67	6.30	6.26	6.23	5.78	6.10	5.86	5.77	5.76	6.06	6.25	6.06	6.00%	6.13%	
KK Energy /Kinder Morgan	7.45	023551AJ3	Sr Deb	03/01/2036	BB	9.82	10.01		8.87	8.66	8.82	8.57	8.22	7.54	7.83	7.83	7.83	8.55%	7.83%	
Amerada Hess Corp.	7.3	023551AJ3	Nts	06/15/2031	NR	5.70	5.84	5.84	5.72	5.44	5.52	5.52	5.38	5.09	5.09	5.01	5.51%	5.01%		
Piedmont Natural Gas Co., Inc.	6.25	720188AF2	InsurQuity Nts	06/01/2036	NR	6.32	6.31	6.34	6.22	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.27%	6.25%	

Counts of data

Annual	4th Qtr	
AAA's	4.08%	3.73%
AA's	5.54%	4.84%
A's	5.45%	4.82%
BBB's	5.90%	5.82%
BB's	6.27%	6.10%
NR's	5.89%	5.83%

*Investment Grade (BBB- & Above)



Montana Department of
REVENUE

2012 Capitalization Rate Study

Telecommunications

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study

Industry: Telecommunications, Telephone Exchange Carriers
2012 Assessment Year

Equity Measures Calculated:

E/P estimates:

All	B & Above	Local	
5.05%	5.29%	4.38%	Yahoo
5.63%	5.94%	6.20%	Value Line
5.34%	5.62%	5.29%	Average of E/Ps

Inverse of P/E Ratios:

5.02%	5.24%	4.40%	Yahoo
6.24%	5.94%	6.20%	Value Line
5.63%	5.59%	5.30%	Average of Inverse of the P/E
6.25%	6.45%	5.80%	Inverse of median P/E, Value Line
5.48%	5.61%	5.30%	Average of all above except median P/E

Mean = 5.64% 5.77% 5.40%

Median = 5.63% 5.94% 5.80%

Debt Measure Calculated, Current Yield:

Annual	4th Qtr	
6.57%	6.52%	ALL
6.18%	6.07%	BBB- & Above
6.29%	6.23%	BB- & Above

Mean = 6.35% 6.27%
 Median = 6.29% 6.23%

Debt Measure = 6.50%

Equity Measure NUOI = 6.50%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate					
Equity	70.00%	x	6.50%	=	4.55%
Debt	30.00%	x	6.50%	=	1.95%
	100.00%				6.50%
Direct Cap Rate NUOI =					6.50%

Gross Cash Flow / Price:

All	B & Above	Local	
26.22%	23.19%	30.00%	Value Line

Equity Measure Gross = 23.00%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)					
Equity	70.00%	x	23.00%	=	16.10%
Debt	30.00%	x	6.50%	=	1.95%
	100.00%				18.05%
Direct Cap Rate GCF =					18.25%

MONTANA DEPARTMENT OF REVENUE

**Direct Capitalization Rate Study
Industry: Telecommunications - Wireless
2012 Assessment Year**

Equity Measures Calculated:

Debt Measure Calculated, Current Yield:

E/P estimates:

All	Wireless	Mixed	Median	
6.79%	6.83%	6.75%	6.75%	Yahoo
5.74%	7.33%	4.68%	5.89%	Value Line
6.26%	7.08%	5.71%	6.32%	Average of E/Ps

	Annual	4th Qtr	
	6.57%	6.52%	ALL
	6.18%	6.07%	BBB- & Above
	6.29%	6.23%	BB- & Above

Inverse of P/E Ratios:

6.52%	6.48%	6.55%	6.55%	Yahoo
6.31%	6.35%	6.29%	6.10%	Value Line
6.41%	6.42%	6.42%	6.33%	Average of Inverse of the P/E
5.30%	3.45%	7.14%	5.30%	Inverse of median P/E, Value Line
6.34%	6.75%	6.07%	6.32%	Average of all above except median P/E

Mean = 6.35% 6.27%
Median = 6.29% 6.23%

Debt Measure = 6.50%

Mean = 6.13% 6.09% 6.28% 6.12%
Median = 6.31% 6.48% 6.55% 6.10%

Equity Measure NUOI = 6.51%

Industry Market Capital Structure NUOI Rate				
Equity	73.00%	x	6.51%	= 4.75%
Debt	27.00%	x	6.50%	= 1.76%
	100.00%			6.51%
Direct Cap Rate NUOI =				6.75%

Gross Cash Flow / Price:

All	Wireless	Mixed	Median	
29.41%	35.58%	21.18%	23.16%	Value Line

Equity Measure Gross = 23.00%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)				
Equity	73.00%	x	23.00%	= 16.79%
Debt	27.00%	x	6.50%	= 1.76%
	100.00%			18.55%
Direct Cap Rate GCF =				18.75%

MONTANA DEPARTMENT OF REVENUE

**Yield Capitalization Rate Study
Industry: Telecommunications
2012 Assessment Year**

<u>Equity Measures Calculated:</u>	Exchange Carriers	Wireless Carriers
Dividend Growth Model	9.00%	8.50%
Capital Asset Pricing Model	8.08%	8.39%
Mean =	8.54%	8.44%
Median =	8.54%	8.44%
Equity Measure FCF =	8.20%	8.50%

Debt Measures Calculated, Yield to Maturity:

	ALL DEBT		20 YEAR PLUS DEBT	
	Annual	4th Qtr	Annual	4th Qtr
ALL	5.02%	5.19%	6.16%	5.90%
BBB- & Above	5.02%	5.19%	5.95%	5.54%
BB- & Above	4.84%	4.72%	8.42%	8.90%
Mean =	4.96%	5.03%	6.84%	6.78%
Median =	5.02%	5.19%	6.16%	5.90%

Debt Measure = 5.00%

Yield Cap Rate Free Cash Flow - Telecommunications, Exchange Carriers					
Equity	70.00%	x	8.20%	=	5.74%
Debt	30.00%	x	5.00%	=	1.50%
	100.00%				7.24%
Weighted Average Cost of Capital (WACC) =					7.25%

Yield Cap Rate Free Cash Flow - Telecommunications, Wireless Carriers					
Equity	73.00%	x	8.50%	=	6.21%
Debt	27.00%	x	5.00%	=	1.35%
	100.00%				7.56%
Weighted Average Cost of Capital (WACC) =					7.75%

Where Assumed Growth Rate = Inflation **Growth = 2.05%**
see appendix for calculation

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Exchange Carriers
2012 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common	(VL) Book Value Common (000) FxD	(VL) Book Value Preferred (000)	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Pref. & Debt
AT&T Inc**	T	A+	5,911,100	28.85	18.94	170,554,939	111,956,234	0	58,971,000	1.00	58,971,000
Verizon Communications**	VZ	A+	2,828,100	37.35	13.64	105,624,822	38,575,284	0	45,252,000	1.00	45,252,000
CenturyLink Inc	CTL	B++	304,900	35.28	31.64	10,755,348	9,647,036	0	7,316,000	1.00	7,316,000
Frontier Communications	FTR	B	993,900	5.63	5.24	5,597,314	5,208,036	0	7,983,700	1.00	7,983,700
Hickory Tech Corp	HTCO	B	13,300	10.75	3.11	142,931	41,363	0	114,100	1.00	114,100
Windstream Corporation	WIN	B	504,300	11.71	1.65	5,907,034	832,095	0	7,186,600	1.00	7,186,600
Alaska Communic Sys Grp**	ALSK	C+	44,700	5.61	(0.46)	250,916	(20,562)	0	548,100	1.00	548,100
Cincinnati Bell	CBB	C+	201,000	3.04	(3.97)	610,705	(797,970)	129,400	2,507,100	1.00	2,636,500

SUMS & AVERAGES

Cos. with positive per share- price, book value, and cash flow.
Local Carriers - CTL, FTR, HTCO, WIN, CBB, Q

* All Negative values left out of calculations

All	299,444,007	166,260,048	129,400	129,878,600	130,008,000
B and Above	298,582,386	166,260,048	0	126,823,400	126,823,400
Local Carriers	23,013,331	15,728,530	129,400	25,107,500	25,236,900
Mixed Carriers	276,430,676	150,531,518	0	104,771,100	104,771,100

Notes/Rational for Changes to Guideline Companies

Qwest Merged with CenturyLink so removed from 2012 Study

INDUSTRY MARKET STRUCTURES							
	ALL COMPANIES		B & ABOVE		LOCAL ONLY		MIXED
COMMON	70.00%	299,444,007	70.00%	298,582,386	48.00%	23,013,331	73.00%
DEBT	30.00%	130,008,000	30.00%	126,823,400	52.00%	25,236,900	27.00%
TOTAL	100.00%	429,452,007	100.00%	425,405,786	100.00%	48,250,231	100.00%
							381,201,776

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Exchange Carriers
2012 Assessment Year

A	B	M	N	O	P	Q	R	S	T	U	V	W	X	Y
Company	Ticker Symbol	(YAHOO) EPS	(YAHOO) E/P	(VL) EPS	(VL) E/P	(VL) CF/S	(VL) CF/P	(YAHOO) P/E	(YAHOO) Inverse of P/E	(VL) P/E	(VL) Inverse of P/E	(VL) Median P/E	(VL) Inverse of Median P/E	(VL) Beta
	A	M/E		O/E		Q/E		1/S		1/U		1/X		
AT&T Inc**	T	1.97	6.83%	2.30	7.97%	5.70	19.76%	14.93	6.70%	12.51	7.99%	14.00	7.14%	0.75
Verizon Communications**	VZ	2.49	6.67%	2.20	5.89%	7.70	20.62%	15.61	6.41%	16.39	6.10%	14.00	7.14%	0.70
CenturyLink Inc	CTL	1.51	4.28%	1.65	4.68%	9.55	27.07%	23.95	4.17%	24.49	4.08%	13.00	7.69%	0.75
Frontier Communications	FTR	0.16	2.84%	0.23	4.08%	1.65	29.30%	33.25	3.01%	19.42	5.15%	25.00	4.00%	0.90
Hickory Tech Corp	HTCO	0.73	6.79%	0.73	6.79%		NA	14.65	6.83%	NA	NA	16.00	6.25%	0.60
Windstream Corporation	WIN	0.51	4.35%	0.73	6.23%	2.25	19.21%	22.99	4.35%	15.68	6.38%	N/A	N/A	0.90
Alaska Communic Sys Grp**	ALSK	(0.07)	(1.25%)	0.01	0.18%	1.30	23.16%	(59.43)	(1.68%)	21.00	4.76%	N/A	N/A	0.80
Cincinnati Bell	CBB	0.11	3.62%	0.28	9.22%	1.35	44.43%	27.45	3.64%	10.87	9.20%	19.00	5.26%	1.05
SUMS & AVERAGES		All	5.05%		5.63%		26.22%		5.02%		6.24%		6.25%	0.81
Cos. with positive per share- price, book value, and cash flow.		B and Above	5.29%		5.94%		23.19%		5.24%		5.94%		6.45%	0.77
Local Carriers - CTL, FTR, HTCO, WIN, CBB, Q		Local Carriers	4.38%		6.20%		30.00%		4.40%		6.20%		5.80%	0.84
		Mixed Carriers	6.75%		4.68%		21.18%		6.55%		6.29%		7.14%	0.75

* All Negative values left out of calculations

Beta of Exchange Carriers = 0.85

Notes/Rational for Changes to Guideline Companies

Qwest Merged with CenturyLink so removed from 2012 Study

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Wireless
2012 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common (000) DxE	(VL) Book Value Common (000) FxD	(VL) Book Value Preferred (000)	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Pref. & Debt
AT&T Inc**	T	A+	5,911,100	28.85	18.94	170,554,939	111,956,234	0	58,971,000	1.00	58,971,000
Verizon Communications**	VZ	A+	2,828,100	37.35	13.64	105,624,822	38,575,284	0	45,252,000	1.00	45,252,000
Alaska Communic Sys Grp**	ALSK	C+	44,700	5.61	(0.46)	250,916	(20,562)	0	548,100	1.00	548,100
U.S. Cellular	USM	B+	85,500	41.17	41.31	3,520,035	3,532,005	0	867,900	1.00	867,900
Telephone & Data Sys	TDS	B	103,900	24.17	36.68	2,510,917	3,811,052	800	1,499,900	1.00	1,500,700
Sprint Nextel Corp	S	C++	2,988,000	2.63	4.87	7,853,480	14,551,560	0	18,535,000	1.00	18,535,000
Leap Wireless	LEAP	C	78,400	7.89	11.62	618,315	911,008	0	2,832,100	1.00	2,832,100

SUMS & AVERAGES

Cos. with positive per share- price, book value, and cash flow.

All Comp	290,933,403	173,337,143	800	128,506,000	128,506,800
All Wireless	14,502,726	22,805,625	800	23,734,900	23,735,700
Mixed	276,430,676	150,531,518	-	104,771,100	104,771,100

* All Negative values left out of calculations

INDUSTRY MARKET STRUCTURE					
	All Companies		All Wireless		Mixed
COMMON	69.00%	290,933,403	38.00%	14,502,726	73.00%
DEBT	31.00%	128,506,800	62.00%	23,735,700	27.00%
TOTAL	100.00%	419,440,203	100.00%	38,238,426	100.00%

Notes/Rational for Changes to Guideline Companies

No Changes for TY 2012

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications, Wireless
2012 Assessment Year

A Company	B Ticker Symbol	M (YAHOO) EPS	N (YAHOO) E/P	O (VL) EPS	P (VL) E/P	Q (VL) CF/S	R (VL) CF/P	S (YAHOO) P/E	T (YAHOO) Inverse of P/E	U (VL) P/E	V (VL) Inverse of P/E	W (VL) Median P/E	X (VL) Inverse of Median P/E	Y (VL) Beta
AT&T Inc**	T	1.97	6.83%	2.30	7.97%	5.70	19.76%	14.93	6.70%	12.51	7.99%	14.00	7.14%	0.75
Verizon Communications**	VZ	2.49	6.67%	2.20	5.89%	7.70	20.62%	15.61	6.41%	16.39	6.10%	14.00	7.14%	0.70
Alaska Communic Sys Grp**	ALSK	(0.07)	(1.25%)	0.01	0.18%	1.30	23.16%	(59.43)	(1.68%)	21.00	4.76%	NA	NA	0.80
U.S. Cellular	USM	2.06	5.00%	2.20	5.34%	8.90	21.62%	20.67	4.84%	21.26	4.70%	29.00	3.45%	1.10
Telephone & Data Sys	TDS	2.09	8.65%	2.25	9.31%	9.25	38.28%	12.31	8.13%	12.50	8.00%	29.00	3.45%	0.90
Sprint Nextel Corp	S	(0.84)	(31.96%)	(0.85)	(32.34%)	0.80	30.44%	(2.98)	(33.60%)	NA	NA	NA	NA	1.30
Leap Wireless	LEAP	(6.28)	(79.63%)	(3.27)	(41.46%)	4.10	51.99%	(1.43)	(69.74%)	NA	NA	NA	NA	1.45
SUMS & AVERAGES		All Comp	6.79%		5.74%		29.41%		6.52%		6.31%		5.30%	1.00
Cos. with positive per share- price, book value, and cash flow.		All Wireless	6.83%		7.33%		35.58%		6.48%		6.35%		3.45%	1.19
Mixed		6.75%		4.68%		21.18%		6.55%		6.29%		7.14%		0.75
All Median		6.75%		5.89%		23.16%		6.55%		6.10%		5.30%		0.90

Beta of Wireless Industry = 0.90

* All Negative values left out of calculations

Notes/Rational for Changes to Guideline Companies

No Changes for TY 2012

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model
Industry: Telecommunications
2012 Assessment Year

$$K_E = R_F + \beta (R_M - R_F)$$

	Exchange Carriers	Wireless Carriers
K_E = Cost of Equity	8.08%	8.39%
R_F = Risk Free Rate	2.89%	2.89%
β = Beta	0.85	0.90
R_M = Market Rate of Return	9.00%	9.00%
R_P = Equity Risk Premium ($R_M - R_F$)	6.11%	6.11%

R_m = Investor's Market Rate of Return

Ibbotson, SBBI, Large Company, Average Annual Return, *Arithmetic Average, Ex-Post
Ibbotson, SBBI, Large Company, Average Annual Return, *Geometric Average, Ex-Post
3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante

$R_M =$	11.80%
$R_M =$	9.80%
$R_M =$	9.00%

Mean = 10.20%
Median = 9.80%

$R_M =$ **9.00%**

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2011-31 Table 2 December 2011

Rev Rule 2011-31 Table 2

<u>Annual Rates</u>	Short Term - AFR	$R_f =$ 0.45%
	Mid Term - AFR	$R_f =$ 1.69%
	Long Term - AFR	$R_f =$ 3.55%

The ValueLine Investment Survey

U.S. Treasury Securities January 6, 2012

3 Month	$R_f =$ 0.01%
6 Month	$R_f =$ 0.05%
1 Year	$R_f =$ 0.10%

Federal Reserve Statistical Release

Treasury constant Maturity, 2011

Market yield on U.S. Treasury securities, Annual Averages

3-month constant maturity, quoted on investment basis	$R_f =$ 0.02%
6-month constant maturity, quoted on investment basis	$R_f =$ 0.06%
1-year constant maturity, quoted on investment basis	$R_f =$ 0.12%

U.S. Treasury Securities Long-Term December 30, 2011

20 year constant maturity	$R_f = 2.57\%$	Mean = 0.67%
30 year constant maturity	$R_f = 2.89\%$	Median = 0.10%

Weighted Mean = 0.86%

$R_f =$ **2.89%**

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Telecommunications
2012 Assessment Year

$$K_E = D_1 / P_0 + G_A$$

KE= Cost of Equity

D1= Expected Dividends

P0= Current Price Per Share

G= Sustainable Growth

Major Exchange Carriers:

Company Name	Ticker	Stock Price (P0)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G1)	Ke
AT&T Inc.	T	28.85	1.76	6.10%	3.50%	9.60%
Verizon Communications	VZ	37.35	2.00	5.35%	2.00%	7.35%
CenturyLink Inc.	CTL	35.28	2.90	8.22%	3.00%	8.22%
Alaska Communic Sys Grp	ALSK	5.61	0.86	15.32%	<i>Nil</i>	15.32%
Frontier Communications	FTR	5.63	0.75	13.32%	(4.00%)	9.32%
Hickory Tech Corp	HTCO	10.75				
Windstream Corporation	WIN	11.71	1.00	8.54%	<i>Nil</i>	8.54%
Cincinnati Bell	CBB	3.04	<i>Nil</i>		<i>Nil</i>	
Qwest Communications Intl	Q					

* Qwest Merged with CenturyLink Inc. removed from study

Mean = 9.73%

Median = 8.93%

Estimated Cost of Equity = 9.00%

Wireless Sector:

Company Name	Ticker	Stock Price (P0)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G1)	Ke
AT&T Inc.	T	28.85	1.76	6.10%	3.50%	9.60%
Alaska Communic Sys Grp	ALSK	5.61	0.86	15.32%	<i>Nil</i>	15.32%
Leap Wireless	LEAP	7.89	<i>Nil</i>		<i>Nil</i>	
Verizon Communications	VZ	37.35	2.00	5.35%	2.00%	7.35%
Sprint Nextel Corp	S	2.63	<i>Nil</i>		<i>Nil</i>	
Telephone & Data Sys	TDS	24.17	0.49	2.03%	4.00%	6.03%
U.S. Cellular	USM	41.17	<i>Nil</i>		<i>Nil</i>	

Mean = 9.58%

Median = 8.48%

Estimated Cost of Equity = 8.50%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications
2012 Assessment Year

														Yahoo			
Ticker	Company	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P- EPS Ist 12 mo	
ALSK	Alaska Communic Sys Grp	high low	\$11.30 \$8.78	\$10.19 \$9.24	\$11.01 \$9.76	\$10.68 \$9.55	\$9.73 \$8.69	\$9.10 \$8.64	\$9.00 \$6.85	\$7.78 \$6.33	\$7.76 \$6.53	\$7.12 \$5.59	\$7.85 \$4.80	\$5.50 \$2.82	\$5.61	\$8.11	(59.43) (0.07)
AMT	American Tower Corp	high low	\$52.48 \$48.78	\$56.84 \$51.05	\$54.12 \$45.85	\$53.14 \$49.08	\$55.51 \$51.23	\$55.52 \$49.19	\$54.39 \$51.10	\$54.89 \$46.04	\$56.21 \$51.45	\$57.28 \$51.05	\$59.61 \$53.02	\$60.91 \$56.99	\$56.48	\$53.16	85.43 0.69
CBB	Cincinnati Bell	high low	\$2.98 \$2.58	\$3.17 \$2.53	\$2.76 \$2.42	\$3.10 \$2.63	\$3.33 \$2.80	\$3.42 \$2.76	\$3.64 \$3.17	\$3.59 \$2.72	\$3.48 \$2.91	\$3.34 \$2.81	\$3.30 \$2.74	\$3.20 \$2.84	\$3.04	\$3.01	27.45 0.11
CTL	CenturyLink Inc	high low	\$46.78 \$41.65	\$45.34 \$39.45	\$42.19 \$39.45	\$41.82 \$38.66	\$43.49 \$39.28	\$43.30 \$38.97	\$41.32 \$36.42	\$37.77 \$31.75	\$35.44 \$32.49	\$36.03 \$31.16	\$38.01 \$34.11	\$37.53 \$34.81	\$35.28	\$38.63	23.95 1.51
FTR	Frontier Communications	high low	\$9.84 \$9.06	\$9.55 \$7.68	\$8.58 \$7.73	\$8.30 \$7.92	\$8.97 \$8.16	\$8.83 \$7.71	\$8.23 \$7.25	\$7.62 \$6.29	\$7.50 \$6.09	\$6.40 \$5.33	\$6.20 \$5.22	\$5.85 \$4.79	\$5.63	\$7.46	33.25 0.16
DY	Dycom Industries	high low	\$17.13 \$14.37	\$17.37 \$15.25	\$18.23 \$15.47	\$17.73 \$14.06	\$17.17 \$13.88	\$17.17 \$14.32	\$18.78 \$16.12	\$18.85 \$12.26	\$18.73 \$15.27	\$20.95 \$14.00	\$20.75 \$17.42	\$21.51 \$18.85	\$18.91	\$16.90	31.53 0.64
HTCO	Hickory Tech Corp	high low	\$10.10 \$9.36	\$10.50 \$9.86	\$9.80 \$8.75	\$9.75 \$9.00	\$10.44 \$9.45	\$12.16 \$10.08	\$12.45 \$10.33	\$10.77 \$8.93	\$9.72 \$8.15	\$11.94 \$9.40	\$12.00 \$9.75	\$11.29 \$10.10	\$10.75	\$10.17	14.65 0.73
IDT	IDT Corp	high low	\$28.17 \$22.43	\$28.59 \$22.64	\$28.35 \$23.50	\$30.46 \$26.71	\$29.83 \$26.00	\$29.56 \$24.01	\$28.40 \$24.01	\$24.80 \$18.59	\$22.11 \$18.93	\$21.47 \$11.50	\$14.20 \$11.02	\$13.64 \$8.82	\$13.44	\$22.41	36.23 0.31
LVLT	Level 3 Communications	high low	\$19.50 \$14.70	\$24.75 \$17.40	\$22.35 \$18.60	\$27.60 \$21.00	\$36.90 \$23.55	\$36.75 \$29.10	\$40.05 \$31.50	\$34.80 \$24.00	\$27.75 \$20.55	\$27.96 \$19.65	\$25.89 \$18.05	\$21.30 \$16.51	\$21.56	\$25.01	(3.33) (5.67)
PGI	Premiere Global Services	high low	\$7.10 \$6.10	\$7.00 \$5.73	\$7.73 \$6.33	\$8.56 \$7.23	\$8.83 \$7.70	\$8.44 \$7.20	\$9.91 \$7.75	\$8.63 \$6.79	\$8.54 \$6.27	\$9.73 \$5.60	\$9.25 \$7.08	\$8.87 \$7.65	\$8.03	\$7.67	48.59 0.17
Q	Qwest Communications Intl	high low	No Data Merged with CenturyLink														
S	Sprint Nextel Corp	high low	\$4.69 \$4.18	\$4.62 \$4.12	\$5.26 \$4.17	\$5.35 \$4.54	\$6.05 \$5.03	\$6.45 \$4.98	\$5.75 \$4.14	\$4.32 \$2.98	\$3.83 \$2.95	\$3.39 \$2.10	\$2.94 \$2.34	\$2.85 \$2.15	\$2.63	\$4.13	(2.98) (0.84)
T	AT&T Inc.	high low	\$30.10 \$27.20	\$28.59 \$27.56	\$30.97 \$27.27	\$31.82 \$29.91	\$31.94 \$30.90	\$31.58 \$30.11	\$31.78 \$28.77	\$30.08 \$27.33	\$29.18 \$27.29	\$29.80 \$27.55	\$29.55 \$27.41	\$30.30 \$28.51	\$28.85	\$29.40	14.93 1.97
TDS	Telephone & Data Sys	high low	\$37.42 \$35.48	\$36.35 \$32.06	\$34.03 \$31.05	\$34.40 \$31.85	\$35.84 \$31.08	\$32.86 \$29.79	\$32.00 \$28.12	\$28.62 \$20.30	\$25.83 \$20.54	\$24.81 \$19.33	\$27.33 \$22.09	\$27.24 \$24.20	\$24.17	\$29.28	12.31 2.09
USM	U.S. Cellular	high low	\$50.85 \$48.05	\$50.34 \$45.82	\$52.10 \$44.21	\$52.41 \$47.14	\$51.10 \$47.14	\$49.56 \$46.25	\$49.75 \$44.08	\$44.63 \$35.58	\$43.64 \$37.83	\$42.65 \$36.84	\$44.05 \$38.30	\$44.09 \$41.09	\$41.17	\$45.31	20.67 2.06
VZ	Verizon Communications	high low	\$37.70 \$34.35	\$36.94 \$35.35	\$38.95 \$33.36	\$38.74 \$36.50	\$38.33 \$36.24	\$37.25 \$34.94	\$37.87 \$34.87	\$36.72 \$32.28	\$37.39 \$34.65	\$37.84 \$35.46	\$37.73 \$35.32	\$40.25 \$37.49	\$37.35	\$36.52	15.61 2.49
VOD	Vodafone Grp	high low	\$29.13 \$26.34	\$29.75 \$27.90	\$29.67 \$26.71	\$29.46 \$28.06	\$29.27 \$27.12	\$27.14 \$25.67	\$28.56 \$25.25	\$28.75 \$25.03	\$26.88 \$24.31	\$28.79 \$25.42	\$29.28 \$25.63	\$28.11 \$26.78	\$27.34	\$27.46	13.01 2.11

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Telecommunications
2012 Assessment Year

Ticker	Company														Yahoo			
			Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P- EPS 1st 12 mo	
VG	Vonage Holdings Corp	high	\$3.38	\$4.94	\$4.80	\$5.30	\$5.39	\$4.83	\$4.82	\$4.12	\$3.62	\$3.52	\$3.28	\$2.69	\$2.69	\$3.68	33.79	0.07
		low	\$2.25	\$3.25	\$3.70	\$4.41	\$4.35	\$3.99	\$3.92	\$2.52	\$2.51	\$2.43	\$2.15	\$2.04				
WIN	Windstream Corporation	high	\$14.04	\$13.27	\$13.13	\$12.93	\$13.57	\$13.41	\$13.25	\$12.75	\$13.08	\$12.35	\$12.60	\$12.20	\$11.71	\$12.44	22.99	0.51
		low	\$12.64	\$12.05	\$12.35	\$12.38	\$12.55	\$12.75	\$11.82	\$10.76	\$11.63	\$10.88	\$11.00	\$11.25				
LEAP	Leap Wireless	high	\$14.70	\$14.49	\$15.99	\$16.64	\$17.42	\$17.66	\$16.95	\$13.67	\$9.23	\$7.15	\$9.70	\$10.35	\$7.89	\$12.10	(1.43)	(6.28)
		low	\$12.51	\$11.99	\$11.48	\$14.39	\$14.86	\$15.32	\$13.01	\$5.78	\$6.89	\$5.50	\$6.96	\$7.66				
CLWR	Clearwire Corp.	high	\$6.00	\$6.00	\$5.95	\$6.11	\$5.19	\$4.65	\$4.07	\$3.42	\$3.50	\$2.53	\$2.25	\$2.64	\$1.96	\$3.69	(0.13)	(17.67)
		low	\$5.05	\$4.75	\$4.71	\$4.75	\$3.97	\$3.35	\$1.98	\$1.32	\$2.07	\$1.24	\$1.28	\$1.84				

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
GTE Southwest	8.5	362338AQ8	1st	11/15/2031	A+	7.06	6.89	6.91	6.89	6.69	6.78	6.45	6.25	6.03	6.20	6.14	6.02	6.53%	6.12%
Southwest'n Bell Tel	7.375	845335BX5	Deb	07/15/2027	A	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18	7.18%	7.18%
Southwest'n Bell Tel	7	845335BZ0	Deb	11/15/2027	A	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84%	6.84%
AT&T Corp.	6.5	001957AW9	Nts	03/15/2029	A-	6.21	6.16	6.14	6.12	5.95	5.97	5.97	5.88	5.75	5.62	5.66	5.43	5.91%	5.57%
AT&T Corp.	8	001957BD0	Sr Nts	11/15/2031	A-	6.38	6.29	6.38	6.25	6.01	5.97	5.97	5.94	5.70	5.61	5.98	5.66	6.01%	5.75%
AT&T Corp.	6.5	001957BJ7	Nts	03/15/2013	A-	5.92	5.96	5.99	5.97	5.97	5.98	5.98	6.04	6.05	6.07	6.08	6.10	6.01%	6.08%
AT&TCorp	6.5	001957BJ7	Nt	3/15/2013	A-	5.92	5.96	5.99	5.97	5.97	5.98	5.98	6.04	6.05	6.07	6.08	6.10	6.01%	6.08%
AT&T Inc.	6.8	00206RAB8	Nts	05/15/2036	A-	6.27	6.18	6.32	6.27	6.00	6.03	6.03	5.87	5.56	5.57	5.52	5.37	5.92%	5.49%
AT&T Inc.	6.5	00206RAD4	GlobalNts	09/01/2037	A-	6.17	6.10	6.23	6.15	5.93	5.95	5.95	5.76	5.47	5.36	5.41	5.22	5.81%	5.33%
AT&T Inc.	4.95	00206RAF9	GlobalNts	01/15/2013	A-	4.61	4.62	4.64	4.64	4.65	4.65	4.65	4.71	4.72	4.72	4.74	4.74	4.67%	4.73%
AT&T Inc.	6.3	00206RAG7	GlobalNts	01/15/2038	A-	6.11	6.06	6.19	6.11	5.89	5.89	5.89	5.72	5.42	5.32	5.36	5.13	5.76%	5.27%
AT&T Inc.	5.5	00206RAJ1	GlobalNts	02/01/2018	A-	4.99	5.00	5.03	5.01	4.93	4.87	4.87	4.80	4.74	4.76	4.80	4.75	4.88%	4.77%
AT&T Inc.	5.6	00206RAM4	GlobalNts	05/15/2018	A-	5.05	5.06	5.09	5.07	4.98	4.95	4.95	4.85	4.80	4.81	4.89	4.81	4.94%	4.84%
AT&T Inc.	6.4	00206RAN2	GlobalNts	05/15/2038	A-	6.14	6.12	6.22	6.12	5.93	5.92	5.92	5.77	5.44	5.33	5.42	5.18	5.79%	5.31%
AT&T Wireless Services	8.75	00209AF3	Sr Nts	03/01/2031	A-	6.43	6.33	6.38	6.28	6.06	6.07	6.07	6.08	5.76	5.91	6.05	5.95	6.11%	5.97%
AT&T Wireless Services	8.12	00209AG1	Sr Nts	05/01/2012	A-	7.46	7.49	7.54	7.57	7.61	7.65	7.65	7.74	7.79	7.84	7.88	7.91	7.68%	7.88%
ALLTEL Corp	6.5	020039AD5	Deb	11/1/2013	A-	5.81	5.83	5.84	5.84	5.84	5.84	5.84	5.89	5.93	5.96	5.98	6.00	5.88%	5.98%
ALLTEL Corp	7	020039AE3	Deb	3/15/2016	A-	5.94	6.00	5.97	5.95	5.83	5.78	5.78	5.88	5.86	5.82	5.92	5.90	5.89%	5.88%
ALLTEL Corp	6.8	020039AJ2	Deb	5/1/2029	A-	6.03	5.92	5.93	5.91	5.69	5.65	5.65	5.53	5.26	5.35	5.45	5.37	5.65%	5.39%
ALLTEL Corp	7	020039DB6	Sr Nt	7/1/2012	A-	6.47	6.49	6.53	6.54	6.56	6.58	6.58	6.66	6.69	6.72	6.76	6.79	6.61%	6.76%
ALLTEL Corp	7.88	020039DC4	Sr Nt	7/1/2032	A-	6.18	6.07	6.09	6.07	5.89	5.85	5.85	5.76	5.45	5.53	5.59	5.50	5.82%	5.54%
Bell Atlantic-PA	6	07786DAA4	Deb	12/1/2028	A-	6.57	6.43	6.44	6.42	6.01	5.97	5.97	5.63	5.35	5.49	5.56	5.60	5.95%	5.55%
Bell Tel. of Penna	8.35	078167AZ6	Deb	12/15/2030	A-	7.35	7.19	7.20	7.18	6.74	6.70	6.70	6.39	6.08	6.24	6.22	6.68	6.72%	6.38%
Bell Tel. of Penna	8.75	078167BA0	Deb	8/15/2031	A-	7.49	7.24	7.26	7.24	6.79	6.75	6.75	6.51	6.19	6.36	6.33	6.73	6.80%	6.47%
BellSouth Capital Funding	6.04	079857AC2	Deb	11/15/2026	A-	6.18	6.16	6.24	6.22	6.06	6.02	6.02	5.84	5.64	5.69	5.72	5.65	5.95%	5.69%
BellSouth Capital Funding	7.88	079857AH1	Deb	02/15/2030	A-	6.58	6.47	6.51	6.50	6.28	6.24	6.24	6.06	5.83	6.05	6.06	5.85	6.22%	5.99%
BellSouth Corp.	6.875	079860AD4	Nts	10/15/2031	A-	6.32	6.23	6.31	6.26	5.94	6.03	6.03	5.73	5.48	5.55	5.80	5.51	5.93%	5.62%
BellSouth Corp.	6.55	079860AE2	Nts	06/15/2034	A-	6.30	6.24	6.29	6.23	5.92	5.99	5.99	5.85	5.61	5.51	5.66	5.50	5.92%	5.56%
BellSouth Corp.	5.2	079860AG7	Nts	09/15/2014	A-	4.72	4.72	4.75	4.72	4.69	4.69	4.69	4.70	4.73	4.69	4.72	4.70	4.71%	4.70%
BellSouth Corp.	4.75	079860AJ1	Nts	11/15/2012	A-	4.46	4.47	4.48	4.49	4.49	4.50	4.50	4.55	4.56	4.57	4.58	4.59	4.52%	4.58%
BellSouth Corp.	6	079860AK8	Nts	11/15/2034	A-	6.09	6.00	6.12	6.10	5.79	5.82	5.82	5.68	5.48	5.30	5.45	5.28	5.74%	5.34%
BellSouth Corp.	5.2	079860AL6	Nt	12/15/2016	A-	4.75	4.73	4.72	4.60	4.57	4.57	4.57	4.58	4.61	4.56	4.56	4.54	4.62%	4.55%
BellSouth Telecommunications	7	079867AM9	Deb	10/01/2025	A-	6.39	6.29	6.33	6.33	6.13	6.03	6.03	5.79	5.78	5.91	5.94	5.64	6.05%	5.83%
BellSouth Telecommunications	5.85	079867AN7	Deb	11/15/2045	A-	6.62	6.51	6.53	6.49	6.17	6.12	6.12	5.99	5.59	5.66	5.67	5.52	6.08%	5.62%
BellSouth Telecommunications	6.3	079867AQ0	AmortizingDeb	12/15/2015	A-	5.81	5.84	5.88	5.88	5.87	5.87	5.87	5.86	5.90	5.90	5.92	5.93	5.88%	5.92%
BellSouth Telecommunications	6.375	079867AW7	Deb	06/01/2028	A-	6.11	5.97	6.04	6.02	5.86	5.85	5.85	5.74	5.57	5.54	5.55	5.41	5.79%	5.50%
Chesapeake Pot.Tel Md	8	165069AP0	Deb	10/15/2029	A-	7.41	7.25	7.26	7.13	6.70	6.66	6.66	6.43	6.13	6.29	6.27	6.72	6.74%	6.43%
Chesapeake Pot.Tel Md	8.3	165069AQ8	Deb	8/1/2031	A-	7.52	7.35	7.37	7.23	6.78	6.74	6.74	6.50	6.18	6.34	6.32	6.72	6.82%	6.46%
Chesapeake Pot.Tel Md	7.15	165069AS4	Deb	5/1/2023	A-	6.64	6.66	6.66	6.67	6.65	6.64	6.64	6.75	6.76	6.65	6.68	6.70	6.68%	6.68%
Chesapeake&Pot.Tel VA	8.38	165087AL1	Forty Yr Deb	10/1/2029	A-	7.57	7.40	7.42	7.22	6.86	6.82	6.82	6.59	6.28	6.44	6.42	6.80	6.89%	6.55%
Chesapeake&Pot.Tel VA	7.88	165087AN7	Deb	11/15/2022	A-	6.79	6.81	6.83	6.81	6.53	6.44	6.44	6.27	6.17	6.31	6.32	6.30	6.50%	6.31%
Chesapeake&Pot.Tel VA	7.62	165087AP2	20 Yr Deb	12/1/2012	A-	6.92	6.93	6.96	6.98	6.98	7.00	7.00	7.06	7.10	7.15	7.18	7.21	7.04%	7.18%
GTE California	6.75	362311AG7	Deb 'F'	05/15/2027	A-	6.47	6.42	6.43	6.41	6.15	6.25	6.10	5.96	5.71	6.02	6.00	5.87	6.15%	5.96%
GTE Corp	8.75	362320AT0	Deb	11/01/2021	A-	6.80	6.75	6.77	6.71	6.53	6.57	6.39	6.24	6.26	6.20	6.33	6.24	6.48%	6.26%
GTE Corp	6.84	362320AZ6	Deb	04/15/2018	A-	5.96	5.85	5.91	5.90	5.80	5.88	5.74	5.70	5.68	5.75	5.71	5.80%	5.74%	
GTE Corp	6.94	362320BA0	Deb	04/15/2028	A-	6.29	6.18	6.25	6.23	5.94	6.04	5.86	5.90	5.62	5.58	5.68	5.51	5.92%	5.55%
GTE Florida	6.86	362333AH9	Deb 'E'	02/01/2028	A-	6.70	6.48	6.46	6.44	6.30	6.37	6.21	6.06	5.81	6.23	6.33	5.79	6.27%	6.12%
Indiana Bell Telephone	7.3	454614AK4	Deb	08/15/2026	A-	6.44	6.40	6.46	6.40	6.26	6.39	6.45	6.25	6.23	6.20	6.17	6.05	6.31%	6.14%
Michigan Bell Telephone	7.85	594185AQ3	Deb	01/15/2022	A-	6.78	6.70	6.79	6.78	6.37	6.40	6.29	6.24	6.22	6.23	6.17	6.13	6.43%	6.18%
New England Tel. & Tel.	7.88	644239AY1	Deb	11/15/2029	A-	6.91	6.79	6.80	6.78	6.59	6.85	6.57	6.34	6.30	6.46	6.64	6.48	6.63%	6.53%
New Jersey Bell Tel	7.85	645767AW4	Deb	11/15/2029	A-	7.01	6.82	6.80	6.77	6.45	6.60	6.43	6.47	6.29	6.32	6.64	6.47	6.59%	6.48%
New Jersey Bell Tel	8	645767AY0	Deb	06/01/2022	A-	6.68	6.71	6.73	6.71	6.62	6.71	6.48	6.33	6.29	6.37	6.56	6.31	6.54%	6.41%
New York Telephone Co	7	650094BT1	Deb	05/01/2013	A-	6.32	6.34	6.35	6.36	6.39	6.38	6.37	6.37	6.45	6.45	6.46	6.48	6.38%	6.46%
New York Telephone Co	7	650094BV6	Deb	06/15/2013	A-	6.28	6.31	6.32	6.33	6.39	6.38	6.37	6.37	6.45	6.45	6.46	6.48	6.38%	6.46%
New York Telephone Co	6.7	650094CA1	Deb	11/01/2023	A-	6.38	6.39	6.42	6.40	6.25	6.25	6.25	6.25	6.40	6.40	6.42	6.42	6.35%	6.41%
New York Telephone Co	7	650094CB9	Deb	12/01/2033	A-	6.94	6.81	6.78	6.75	6.56	6.58	6.58	6.75	6.75	6.75	6.76	6.60	6.70%	6.70%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
New York Telephone Co	6.5	650094CJ2	Deb	04/15/2028	A-	6.38	6.33	6.34	6.32	6.15	6.25	6.09	6.04	5.78	5.89	5.87	5.91	6.11%	5.89%
Pacific Bell	7.125	694032AT0	Deb	03/15/2026	A-	6.22	6.21	6.29	6.27	5.95	6.05	5.77	5.70	5.71	5.71	5.74	5.66	5.94%	5.70%
Pacific Bell	7.375	694032AV5	Deb	07/15/2043	A-	7.32	6.89	7.01	7.02	6.88	6.27	6.88	6.39	6.82	6.98	6.86	6.84	6.85%	6.89%
Pacific Bell	6.625	694032AX1	Deb	10/15/2034	A-	6.67	6.64	6.56	6.53	6.36	6.36	6.24	6.39	6.37	6.51	6.41	6.27	6.44%	6.40%
SBC Communications Inc.	5.875	78387GAH6	Global Nts	02/01/2012	A-	5.58	5.60	5.63	5.64	5.68	5.56	5.58	5.61	5.64	5.65	5.68	5.82	5.64%	5.72%
SBC Communications Inc.	5.88	78387GAK9	Global Nts	08/15/2012	A-	5.45	5.48	5.50	5.51	5.53	5.70	5.73	5.76	5.78	5.37	5.82	5.69	5.61%	5.63%
SBC Communications	5.62	78387GAL7	Global Nts	06/15/2016	A-	5.00	5.02	5.02	5.01	4.96	4.96	4.88	4.93	4.93	4.89	4.92	4.90	4.95%	4.90%
SBC Communications	6.45	78387GAM5	Global Nts	06/15/2034	A-	6.20	6.13	6.23	6.15	5.95	6.04	5.76	5.69	5.61	5.37	5.64	5.36	5.84%	5.46%
SBC Communications	6.45	78387GAM5	Gbl Nt	6/15/2034	A-	6.20	6.13	6.23	6.15	5.95	6.04	5.76	5.69	5.61	5.37	5.64	5.36	5.84%	5.46%
SBC Communications	6.15	78387GAQ6	Gbl Nt	9/15/2034	A-	6.10	6.02	6.14	6.07	5.84	5.94	5.65	5.63	5.50	5.27	5.47	5.18	5.73%	5.31%
Southwest'n Bell Tel	7	845335BQ0	Deb	07/01/2015	A-	6.08	6.03	6.05	6.04	5.97	5.99	5.92	5.97	6.01	5.97	6.00	5.99	6.00%	5.99%
Verizon Communications Inc.	5.55	92343VAC8	Nts	02/15/2016	A-	4.95	4.97	4.99	4.98	4.92	4.93	4.82	4.88	4.86	4.81	4.85	4.85	4.90%	4.84%
Verizon Communications Inc.	6.25	92343VAF1	Nts	04/01/2037	A-	5.97	6.01	6.10	5.96	5.77	5.89	5.59	5.50	5.21	5.21	5.21	5.06	5.62%	5.16%
Verizon Communications Inc.	5.5	92343VAG9	Nts	04/01/2017	A-	4.96	4.99	4.98	4.95	4.87	4.90	4.76	4.77	4.83	4.80	4.77	4.75	4.86%	4.77%
Verizon Global Fndg	6.875	92344GAQ9	Nts	06/15/2012	A-	6.36	6.39	6.42	6.43	6.46	6.50	6.52	6.57	6.61	6.63	6.64	6.50%	6.64%	
Verizon Global Fndg	7.75	92344GAS5	Nts	06/15/2032	A-	6.40	6.30	6.37	6.33	6.13	6.26	5.96	5.88	5.63	5.59	5.77	5.58	6.02%	5.65%
Verizon Global Fndg	7.375	92344GAT3	Nts	09/01/2012	A-	6.70	6.74	6.77	6.79	6.82	6.86	6.88	6.93	6.98	7.00	7.01	7.01	6.87%	7.01%
Verizon Global Fndg	4.375	92344GAV8	Nts	06/01/2013	A-	4.08	4.09	4.10	4.11	4.11	4.12	4.12	4.14	4.15	4.15	4.16	4.17	4.13%	4.16%
Verizon Global Fndg	4.9	92344GAW6	Nts	09/15/2015	A-	4.45	4.48	4.49	4.47	4.40	4.42	4.36	4.34	4.37	4.38	4.39	4.36	4.41%	4.38%
Verizon Global Fndg	5.85	92344GAX4	Nts	09/15/2035	A-	5.83	5.81	5.90	5.77	5.58	5.69	5.39	5.27	4.98	4.89	5.10	4.89	5.43%	4.96%
Verizon New England	4.75	92344RAB8	Deb 'C'	10/01/2013	A-	4.44	4.46	4.46	4.45	4.45	4.46	4.46	4.47	4.49	4.50	4.51	4.52	4.47%	4.51%
Verizon NJ	5.875	92344UAA3	Deb 'A'	01/17/2012	A-	5.60	5.62	5.64	5.66	5.69	5.72	5.74	5.77	5.79	5.81	5.84	5.87	5.73%	5.84%
Verizon Maryland	5.125	92344WAB7	Deb 'B'	06/15/2033	A-	5.97	5.66	5.67	5.61	5.39	5.50	5.36	5.33	5.04	5.00	4.97	4.90	5.37%	4.96%
Verizon Virginia	4.625	92345NAA8	Deb 'A'	03/15/2013	A-	4.37	4.36	4.38	4.38	4.37	4.39	4.38	4.40	4.43	4.50	4.45	4.44	4.40%	4.46%
Vodafone Group Plc	5.75	92857WAK6	Notes	03/15/2016	A-	5.11	5.15	5.14	5.13	5.02	5.09	4.99	5.02	5.04	4.96	5.00	5.01	5.06%	4.99%
Wisconsin Bell Inc	6.35	976585AG4	Deb	12/01/2026	A-	6.68	6.63	6.67	6.65	6.48	6.55	6.39	6.18	5.99	5.92	5.93	5.82	6.32%	5.89%
BellSouth Telecommunications	7		Deb	12/15/2095	A-	6.83	6.75	6.87	6.62	6.41	6.67	6.27	6.23	5.91	5.74	5.94	5.58	6.32%	5.75%
AT&T Broadband	8.38	00209TAA3	Nts	03/15/2013	BBB+	7.35	7.38	7.42	7.43	7.44	7.45	7.45	7.54	7.61	7.63	7.66	7.70	7.51%	7.66%
AT&T Broadband	9.46	00209TAB1	Nts	11/15/2022	BBB+	6.92	6.93	6.93	6.85	6.73	6.66	6.66	6.41	6.50	6.58	6.82	6.63	6.72%	6.68%
TCI Communications	8.75	872287AC1	Sr Deb	08/01/2015	BBB+	7.08	7.17	7.21	7.19	7.11	7.13	7.06	7.17	7.18	7.09	7.17	7.20	7.15%	
TCI Communications	7.875	872287AF4	Sr Deb	02/15/2026	BBB+	6.41	6.47	6.56	6.41	6.13	6.14	6.04	5.83	6.10	6.02	6.13	5.94	6.18%	6.03%
TCI Communications	7.125	872287AL1	Sr Nts	02/15/2028	BBB+	6.40	6.35	6.28	6.26	6.06	6.16	6.00	5.93	5.81	5.79	5.91	5.81	6.08%	5.84%
Tele-Communications(Old)	9.8	879240AN9	Sr Deb	02/01/2012	BBB+	9.06	9.07	9.09	9.17	9.25	9.32	9.38	9.47	9.54	9.60	9.67	9.73	9.36%	9.67%
Tele-Communications(Old)	10.125	879240AQ2	Sr Deb	04/15/2022	BBB+	7.51	7.35	7.43	7.42	7.25	7.32	7.14	7.05	7.06	7.01	6.99	6.99	7.22%	7.05%
Tele-Communications(Old)	7.88	879240AX7	Sr Deb	08/01/2013	BBB+	6.89	6.95	6.99	6.94	6.96	6.99	7.00	7.02	7.09	7.10	7.16	7.15	7.02%	7.14%
Carolina Tel. & Tel	6.75	144195AN4	Deb	08/15/2013	BBB-	6.30	6.30	6.32	6.32	6.28	6.28	6.28	6.36	6.45	6.45	6.46	6.49	6.36%	6.47%
Centel Capital	9	15133KAC7	Deb	10/15/2019	BBB-	7.91	7.81	7.71	7.82	7.51	7.64	7.64	7.80	7.93	7.95	7.91	7.99	7.80%	7.95%
Mountain States Tel&Tel	7.38	624284BD6	Deb	05/01/2030	BBB-	7.52	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49%	7.49%
Northwestern Bell Tel	7.75	668027AT2	Deb	05/01/2030	BBB-	7.71	7.65	7.65	7.32	7.12	7.24	7.08	7.06	7.00	7.28	7.16	7.05	7.28%	7.16%
Qwest Corp	7.5	74913GAG0	Nts	10/01/2014	BBB-	6.56	6.55	6.55	6.57	6.61	6.69	6.64	6.77	6.94	6.84	6.86	6.80	6.70%	6.83%
Qwest Corp	7.62	74913GAK1	Nts	06/15/2015	BBB-	6.63	6.64	6.61	6.68	6.64	6.75	6.63	6.85	7.13	6.96	6.99	6.88	6.78%	6.94%
Qwest Corp	3.56	74913GAN5	Nt Fltg Rate	6/15/2013	BBB-	3.38	3.39	3.41	3.43	5.84	5.99	5.94	6.07	6.30	6.13	6.10	5.94	5.99%	6.06%
Qwest Corp	6.5	74913GAT2	Nts	06/01/2017	BBB-	5.89	5.90	5.89	5.85	5.84	5.99	5.94	6.07	6.30	6.00	6.09	6.10	6.17%	6.06%
TCA Cable TV	6.53	872241AB0	Deb	02/01/2028	BBB-	6.40	6.38	6.46	6.44	6.23	6.21	6.05	5.84	5.82	6.00	6.09	6.10	6.17%	6.06%
United States Cellular Corp.	6.7	911684AD0	Sr Nts	12/15/2033	BBB-	6.99	6.87	7.02	6.79	6.79	6.79	6.76	7.35	7.35	7.50	7.50	7.49	7.51%	7.51%
U S WEST Communications	7.5	912920AB1	Deb	06/15/2023	BBB-	7.48	7.48	7.47	7.47	7.49	7.52	7.60	7.60	7.53	7.50	7.49	7.51%		
U S WEST Communications	6.875	912920AC9	Deb	09/15/2033	BBB-	6.94	6.90	6.89	6.97	6.99	7.13	6.94	7.16	7.28	6.92	7.02	6.92	7.01%	6.95%
U S WEST Communications	7.125	912920AG0	Deb	11/15/2043	BBB-	7.36	7.36	7.30	7.17	7.29	7.50	7.36	7.66	7.35	7.35	7.36	7.37	7.37%	7.35%
U S WEST Communications	7.25	912920AK1	Deb	09/15/2025	BBB-	6.77	6.87	6.83	6.93	6.79	7.00	6.92	7.40	7.41	7.21	7.07	6.82	6.99%	6.97%
U S WEST Communications	7.2	912920AL9	Deb	11/10/2026	BBB-	7.27	7.21	7.20	7.16	7.17	7.35	7.20	7.35	7.58	7.31	7.31	7.21	7.28%	
U S WEST Communications	7.25	912920AM7	Deb	10/15/2035	BBB-	7.17	7.25	7.21	7.14	7.18	7.32	7.23	7.40	7.41	7.32	7.40	7.27	7.28%	7.33%
United Tel Co(Florida)	6.875	913026AS9	1st FF	07/15/2013	BBB-	6.40	6.41	6.33	6.34	6.37	6.37	6.38	6.45	6.54	6.52	6.56	6.57	6.44%	6.55%
United Tel Co(Florida)	8.375	913026AT7	1st HH	01/15/2025	BBB-	8.07	7.72	7.59	7.57	7.51	7.52	7.30	7.32	7.54	7.45	7.54	7.42	7.55%	7.47%
United Tel Co(Florida)	7.125	913026AU4	1st GG	07/15/2023	BBB-	6.92	6.77	6.74	6.71	6.66	6.67	6.48	6.76	6.96	6.88	6.96	6.98	6.79%	6.94%
Century Tel Enterpr	7.2	156686AJ6	Sr Nts 'D'	12/01/2025	BB	7.28	7.07	6.95	7.00	6.92	7.05	7.05	7.13	7.30	7.25	7.12	7.15	7.11%	7.17%
Century Tel Enterpr	6.875	156686AM9	Deb 'G'	01/15/2028	BB	7.11	6.92	6.80	6.95	6.97	7.20	7.20	7.84	7.58	8.20	7.75	7.37	7.32%	7.77%

MONTANA DEPARTMENT OF REVENUE

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STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
CenturyTel, Inc.	7.875	156700AG1	Sr Nts'L'	08/15/2012	BB	7.28	7.30	7.33	7.36	7.35	7.40	7.40	7.49	7.59	7.55	7.56	7.62	7.44%	7.58%
CenturyTel, Inc.	5	156700AJ5	Sr Nts'M'	02/15/2015	BB	4.81	4.80	4.77	4.77	4.75	4.77	4.77	4.92	5.01	4.99	4.94	4.94	4.85%	4.96%
CenturyTel, Inc.	5.5	156700AK2	Sr Nts'O'	04/01/2013	BB	5.28	5.28	5.29	5.23	5.24	5.22	5.22	5.30	5.36	5.36	5.37	5.38	5.29%	5.37%
CenturyTel, Inc.	6	156700AL0	Sr Nts'N'	04/01/2017	BB	5.71	5.67	5.61	5.63	5.62	5.70	5.70	5.84	6.04	5.82	5.90	5.91	5.76%	5.88%
Citizens Communications Co.	9	17453BAJ0	Sr Nts	08/31/2031	BB	8.49	8.55	8.78	8.73	8.65	8.84	8.84	9.54	9.86	9.18	10.23	9.86	9.13%	9.76%
GTE North Inc	6.73	362337AK3	Deb 'G'	02/15/2028	BB	7.13	7.08	7.09	7.07	6.88	7.17	6.99	8.02	8.19	9.68	9.73	9.57	7.88%	9.66%
Qwest Cap Funding	7.75	74913EAJ9	Nts	02/15/2031	BB	7.54	7.45	7.31	7.24	7.39	7.58	7.56	8.42	8.33	7.91	7.91	7.80	7.70%	7.87%
Qwest Cap Funding	7.62	74913EAQ3	Nts	08/03/2021	BB	7.54	7.40	7.36	7.28	7.40	7.13	6.80	7.24	7.37	7.94	7.96	7.47	7.41%	7.79%
U S WEST Cap Fndg	6.88	912912AQ5	Deb	07/15/2028	BB	7.08	7.01	6.94	6.97	7.12	7.20	7.12	7.47	7.95	7.77	7.68	7.32	7.30%	7.59%
U S WEST Cap Fndg	6.5	912912AR3	Deb	11/15/2018	BB	6.43	6.35	6.35	6.31	6.30	6.40	6.37	6.48	6.77	6.74	6.62	6.58	6.48%	6.65%
Cin Bell Tel	7.25	171870AK4	Sec Nts	06/15/2023	BB-	8.19	8.52	9.17	9.00	7.63	8.23	8.23	8.29	8.28	8.98	8.98	8.78	8.52%	8.91%
Cincinnati Bell Tel	6.3	171875AD9	<SB>(Tel)<EB>	12/01/2028	BB-	7.82	7.97	7.87	7.63	7.52	7.75	7.75	8.28	7.87	8.57	8.40	8.28	7.98%	8.42%
NEXTEL Communications, Inc.	7.38	65332VBD4	Sr Nts	08/01/2015	B+	7.32	7.35	7.32	7.32	7.33	7.38	7.38	7.50	7.78	7.72	8.38	8.06	7.57%	8.05%
Sprint Capital	6.88	852060AD4	Nts	11/15/2028	B+	7.68	7.62	7.41	7.14	7.09	7.24	7.24	7.68	9.20	9.42	9.86	9.63	8.10%	9.64%
Sprint Capital	6.9	852060AG7	Nts	05/01/2019	B+	6.88	6.84	6.66	6.56	6.60	6.70	6.75	7.17	8.02	8.29	8.93	8.38	7.32%	8.53%
Sprint Capital	8.38	852060AS1	Nts	03/15/2012	B+	7.88	7.89	7.91	7.95	8.00	8.05	8.07	8.13	8.29	8.29	8.23	8.37	8.09%	8.30%
Sprint Capital	8.75	852060AT9	Nts	03/15/2032	B+	8.40	8.41	8.21	7.95	7.93	8.08	8.08	8.54	10.07	10.54	10.94	10.81	9.00%	10.76%
Sprint Nextel Corp.	9.25	852061AA8	Deb	04/15/2022	B+	8.70	8.74	8.76	8.42	8.27	8.64	8.64	8.94	9.16	9.03	9.71	9.81	8.90%	9.52%
Sprint Nextel Corp.	6	852061AD2	Nt	12/1/2016	B+	6.10	6.01	5.94	5.87	5.90	6.01	6.00	6.23	6.98	6.81	7.76	7.22	6.40%	7.26%
Windstream Corp.	8.12	97381WAC8	SrNts	08/01/2013	B+	7.38	7.37	7.39	7.42							7.57	7.71	7.59	7.49%
Windstream Corp.	8.62	97381WAD6	SrNts	08/01/2016	B+	8.13	8.15	8.15	8.16							8.25	8.24	8.27	8.19%
Windstream Corp.	7	97381WAFA1	SrNts	03/15/2019	B+	7.03	7.00	6.97	6.88	6.78	6.93	6.88	7.14	7.29	6.93	7.32	6.93	7.01%	7.06%
Cincinnati Bell Tel	7	171871AH9	Sr Nts	02/15/2015	B	6.91	6.86	6.91	6.87	6.87	6.90	6.90	7.10	7.14	6.91	7.12	6.97	6.96%	7.00%
Level 3 Finan	12.25	527298AF0	SrNts	03/15/2013	CCC	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56	11.56%	11.56%
Level 3 Finan	9.25	527298AM5	SrNts	11/01/2014	CCC	9.13	8.95	9.04	8.88	8.98	8.99	9.00	9.14	9.37	9.06	9.08	9.04	9.06%	9.06%
AT&T Corp.	7.3	001957BC2	Sr Nts	11/15/2011	NR	6.93	6.97	7.00	7.03	7.08	7.11	7.11	7.20	7.23	7.26			7.09%	7.26%
Aliant Communications	6.75	016090AA0	Nts	04/01/2028	NR	7.42	7.37	7.53	7.50	7.17	7.13	7.13	7.27	6.92	7.07	6.98	6.85	7.20%	6.97%
BellSouth Corp.	6	079860AB8	Nts	10/15/2011	NR	5.77	5.80	5.82	5.85	5.88	5.90	5.90	5.96	5.99				5.87%	
Centennial Com/Cell Op/PR	8.12	151352AB7	Sr Nts	02/01/2014	NR	7.81	7.81	7.81	7.81	7.81	7.81	7.81	7.81	7.81	7.81	7.81	7.81	7.81%	7.81%
Centennial Commun/Oper Co	10.12	15135EAB1	GtdSr Nts	06/15/2013	NR	9.81	9.81	9.81	9.81	9.81	9.02	9.81	9.81	9.81	9.81	9.81	9.81	9.74%	9.81%
Cincinnati Bell Tel	8.38	171871AE6	Sr Sub Nts	01/15/2014	NR	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.00	7.47%
Cingular Wireless LLC	6.5	17248RAF3	Sr Nt	12/15/2011	NR	6.18	6.21	6.23	6.26	6.29	6.33	6.33	6.39	6.42	6.43	6.43		6.32%	6.43%
Cingular Wireless LLC	7.12	17248RAJ5	Sr Nt	12/15/2031	NR	6.09	6.00	6.12	6.00	5.79	5.75	5.75	5.62	5.39	5.54	5.65	5.50	5.77%	5.56%
Citizens Communications Co.	9.25	17453BAB7	Nts	05/15/2011	NR	9.13	8.98	9.15	9.25									9.13%	
Crown Castle International Corp.	10.75	228227AJ3	Sr Nts	08/01/2011	NR	10.20	10.20	10.20	10.20	10.20	10.20	10.20						10.20%	
Crown Castle International Corp.	9.38	228227AS3	Sr Nts	08/01/2011	NR	8.49	8.49	8.49	8.49	8.49	8.49	8.49						8.49%	
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	NR	7.09	7.03	7.00	7.16									7.71	7.20%
Embarq Corp.	7.08	29078EAB1	Nts	06/01/2016	NR	6.22	6.22	6.22	6.23									6.53	6.28%
Embarq Corp.	6.74	29078EAC9	Nts	06/01/2013	NR	6.18	6.19	6.20	6.17									6.47	6.24%
Qwest Communications Internat	7.5	749121BR9	Sr Nts'B'	02/15/2014	NR	7.38	7.38	7.38										7.47	7.40%
Qwest Communications Internat	7.5	749121BV0	Sr Nts'B'	02/15/2014	NR	7.38	7.38	7.38										7.47	7.47%
Qwest Cap Funding	7.25	74913EAH3	Nts	02/15/2011	NR	7.25												7.25%	
Qwest Corp	8.88	74913GAC9	Nts	03/15/2012	NR	8.23	8.26	8.31	8.35	8.42	8.43	8.49	8.59	8.59	8.58	8.62	8.62	8.46%	8.61%
Qwest Corp	7.88	74913GAE5	Nts	09/01/2011	NR	7.59	7.63	7.68	7.72	7.78	7.88	7.88	7.88	7.88				7.77%	
SBC Communications Inc.	6.25	78387GAD5	Global Nts	03/15/2011	NR	6.20	6.24											6.22%	
SBC Communications Capital	7	78387QAB7	MTN Tranche #	10/1/2012	NR	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97	6.97%	6.97%
Tele-Communications(Old)	9.88	879240AR0	Sr Deb	06/15/2022	NR	7.38	7.41	7.50	7.48	7.17	7.24	6.99	6.95	6.97	6.91	7.05	6.88	7.16%	6.95%
Time Warner Tel Hldgs	9.25	88732AAD9	Sr Nts	02/15/2014	NR	8.98	8.98	8.98	8.98	5.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.73%	8.98%
Verizon Communications Inc.	5.35	92343VAB0	Nts	02/15/2011	NR	5.34												5.34%	
Verizon New England	6.5	92344RAA0	Deb 'A'	09/15/2011	NR	6.27	6.30	6.32	6.35	6.35	6.35	6.35	6.35	6.35				6.33%	
Verizon Pennsylvania	5.65	92344ATA6	Deb 'A'	11/15/2011	NR	5.44	5.46	5.48	5.49									5.47%	
Vodafone Group Plc	5.62	92857WP5	Notes	02/27/2017	NR											4.79	4.87	4.86	4.84%
Vodafone Group Plc	6.15	92857WAQ3	Notes	02/27/2037	NR											4.94	4.93	5.07	4.98%

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
 Industry: Telecommunications
 2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
 CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Vodafone Group Plc	5.35	92857WAR1	Notes	02/27/2012	NR	162	161	160	158	149	149	149	147	147	147	151	150	153	166	156

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
A's	5.95%	5.79%
BBB's	6.90%	6.92%
BB's	7.16%	7.53%
B's	7.73%	8.36%
CCC's	10.31%	10.31%
NR's	7.05%	6.92%
ALL	6.57%	6.52%
BBB- & Above	6.18%	6.07%
BB- & Above	6.29%	6.23%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
GTE Southwest	8.5	362338AQ8	1st	11/15/2031	A+	6.67	6.45	6.46	6.43	6.12	6.25	5.78	5.49	5.17	5.37	5.32	5.16	5.89%	5.28%	
Southwest'n Bell Tel	7.375	845335BX5	Deb	07/15/2027	A	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09	7.09%	7.09%	
Southwest'n Bell Tel	7	845335BZ0	Deb	11/15/2027	A	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77%	6.77%	
AT&T Corp.	6.5	001957AW9	Nts	03/15/2029	A-	6.07	6.00	5.96	5.93	5.67	5.71	5.71	5.56	5.35	5.10	5.17	4.81	5.59%	5.03%	
AT&T Corp.	8	001957BD0	Sr Nts	11/15/2031	A-	5.87	5.75	5.86	5.68	5.32	5.26	5.26	5.21	4.84	4.68	5.22	4.76	5.31%	4.89%	
AT&T Corp.	6.5	001957BJ7	Nts	03/15/2013	A-	1.83	1.96	2.04	1.70	1.54	1.43	1.43	1.50	1.40	0.02	0.02	1.12	1.33%	0.39%	
AT&T Corp.	6.5	001957BJ7	Nt	3/15/2013	A-	1.83	1.96	2.04	1.70	1.54	1.43	1.43	1.50	1.40	0.02	0.02	1.12	1.33%	0.39%	
AT&T Inc.	6.8	00206RAB8	Nts	05/15/2036	A-	6.14	6.03	6.20	6.14	5.78	5.82	5.82	5.61	5.19	5.20	5.13	4.91	5.66%	5.08%	
AT&T Inc.	6.5	00206RAD4	GlobalNts	09/01/2037	A-	6.09	6.01	6.17	6.06	5.79	5.81	5.81	5.56	5.17	5.02	5.09	4.82	5.62%	4.98%	
AT&T Inc.	4.95	00206RAF9	GlobalNts	01/15/2013	A-	1.13	1.16	1.22	1.10	0.98	0.83	0.83	1.24	1.21	0.97	1.10	0.86	1.05%	0.98%	
AT&T Inc.	6.3	00206RAG7	GlobalNts	01/15/2038	A-	6.06	6.01	6.16	6.06	5.79	5.79	5.79	5.56	5.17	5.02	5.08	4.76	5.60%	4.95%	
AT&T Inc.	5.5	00206RAJ1	GlobalNts	02/01/2018	A-	3.83	3.86	3.94	3.84	3.56	3.32	3.32	2.99	2.75	2.80	2.93	2.67	3.32%	2.80%	
AT&T Inc.	5.6	00206RAM4	GlobalNts	05/15/2018	A-	3.88	3.91	3.99	3.89	3.57	3.44	3.44	3.04	2.85	2.85	3.12	2.80	3.40%	2.92%	
AT&T Inc.	6.4	00206RAN2	GlobalNts	05/15/2038	A-	6.08	6.06	6.18	6.06	5.81	5.80	5.80	5.61	5.17	5.02	5.14	4.81	5.63%	4.99%	
AT&T Wireless Services	8.75	00209AAF3	Sr Nts	03/01/2031	A-	5.71	5.56	5.63	5.48	5.14	5.16	5.16	4.66	4.83	5.05	4.93	5.21%	4.94%		
AT&T Wireless Services	8.12	00209AG1	Sr Nts	05/01/2012	A-	0.99	0.91	0.94	0.84	0.81	0.79	0.79	0.84	0.95	4.28	0.29	1.13%	2.29%		
ALLTEL Corp	6.5	020039AD5	Deb	11/1/2013	A-	2.07	2.10	1.99	1.90	1.73	1.58	1.58	1.69	1.81	1.80	2.04	1.87	1.85%	1.90%	
ALLTEL Corp	7	020039AE3	Deb	3/15/2016	A-	3.20	3.39	3.21	3.11	2.56	2.26	2.26	2.56	2.39	1.71	2.19	2.34	2.60%	2.08%	
ALLTEL Corp	6.8	020039AJ2	Deb	5/1/2029	A-	5.67	5.50	5.51	5.48	5.12	5.06	5.06	4.86	4.40	4.56	4.66	4.56	5.04%	4.59%	
ALLTEL Corp	7	020039DB6	Sr Nt	7/1/2012	A-	1.19	1.14	1.19	1.00	0.87	0.68	0.68	0.91	0.94	2.78	3.35	0.93	1.31%	2.35%	
Bell Atlantic-PA	6	07786DAA4	Deb	12/1/2028	A-	6.85	6.64	6.66	6.63	6.02	5.96	5.96	5.41	4.95	5.17	5.29	5.36	5.91%	5.27%	
Bell Tel. of Penna	8.35	78167AZ6	Deb	12/15/2030	A-	7.07	6.85	6.86	6.83	6.22	6.16	6.16	5.71	5.25	5.59	5.42	6.11	6.19%	5.71%	
Bell Tel. of Penna	8.75	78167BA0	Deb	8/15/2031	A-	7.17	6.85	6.86	6.83	6.22	6.16	6.16	5.81	5.35	5.47	5.54	6.11	6.21%	5.71%	
BellSouth Capital Funding	6.04	079857AC2	Deb	11/15/2026	A-	6.27	6.24	6.36	6.33	6.07	6.01	6.01	5.71	5.35	5.42	5.49	5.36	5.89%	5.42%	
BellSouth Capital Funding	7.88	079857AH1	Deb	02/15/2030	A-	6.12	5.95	6.01	5.98	5.66	5.60	5.60	5.31	4.95	5.25	5.27	4.96	5.56%	5.16%	
BellSouth Corp.	6.875	079860AD4	Nts	10/15/2031	A-	6.12	6.00	6.11	6.03	5.57	5.71	5.71	5.26	4.88	5.34	4.91	5.60%	5.13%		
BellSouth Corp.	6.55	079860AE2	Nts	06/15/2034	A-	6.22	6.15	6.21	6.13	5.72	5.81	5.81	5.61	5.28	5.12	5.34	5.11	5.71%	5.19%	
BellSouth Corp.	5.2	079860AG7	Nts	09/15/2014	A-	2.31	2.22	2.35	2.10	1.79	1.72	1.72	1.62	1.75	1.46	1.73	1.22	1.83%	1.47%	
BellSouth Corp.	4.75	079860AJ1	Nts	11/15/2012	A-	1.08	1.16	1.09	1.00	0.88	0.75	0.75	1.20	1.15	0.78	1.11	0.89	0.99%	0.93%	
BellSouth Corp.	6	079860AK8	Nts	11/15/2034	A-	6.12	6.00	6.16	6.13	5.72	5.76	5.76	5.56	5.28	5.03	5.25	5.00	5.65%	5.09%	
BellSouth Corp.	5.2	079860AL6	Nt	12/15/2016	A-	4.73	3.35	3.21	2.68	2.49	2.49	2.49	2.46	2.59	2.19	2.22	2.14	2.78%	2.18%	
BellSouthTelecommunications	7	079867AM9	Deb	10/01/2025	A-	6.02	5.85	5.89	5.89	5.56	5.37	5.37	4.94	4.90	5.12	5.17	4.62	5.39%	4.97%	
BellSouthTelecommunications	5.85	079867AN7	Deb	11/15/2045	A-	6.72	6.59	6.61	6.58	6.22	6.16	6.16	6.01	5.55	5.64	5.64	5.46	6.11%	5.58%	
BellSouthTelecommunications	6.3	079867AQ0	AmortizingDeb	12/15/2015	A-	6.73	4.54	4.68	4.64	4.65	4.68	4.20	4.23	4.46	4.42	4.49	4.57	4.69%	4.49%	
BellSouthTelecommunications	6.375	079867AW7	Deb	06/01/2028	A-	5.97	5.75	5.86	5.83	5.57	5.55	5.55	5.36	5.08	5.05	5.05	4.80	5.45%	4.97%	
Chesapeake Pot.Tel Md	8	165069AP0	Deb	10/15/2029	A-	7.22	7.00	7.01	6.83	6.22	6.16	6.16	5.81	5.35	5.56	5.54	6.21	6.26%	5.77%	
Chesapeake Pot.Tel Md	8.3	165069AQ8	Deb	8/1/2031	A-	7.32	7.10	7.11	6.93	6.32	6.26	6.26	5.91	5.45	5.69	5.64	6.21	6.35%	5.85%	
Chesapeake Pot.Tel Md	7.15	165069AS4	Deb	5/1/2023	A-	6.24	6.27	6.28	6.29	6.25	6.24	6.24	6.42	6.45	6.25	6.25	6.32	6.29%	6.27%	
Chesapeake & Pot.Tel VA	8.38	165087AL1	Forty Yr Deb	10/1/2029	A-	7.32	7.10	7.11	6.83	6.32	6.26	6.26	5.91	5.45	5.66	5.64	6.21	6.34%	5.84%	
Chesapeake & Pot.Tel VA	7.88	165087AN7	Deb	1/15/2022	A-	5.88	5.91	5.94	5.89	5.31	5.12	5.12	4.74	4.50	4.71	4.73	4.72	5.21%	4.72%	
Chesapeake & Pot.Tel VA	7.62	165087AP2	20 Yr Deb	12/1/2012	A-	1.96	1.83	1.84	1.75	1.50	1.33	1.33	1.25	1.35	0.94	1.40	1.42	1.49%	1.25%	
GTE California	6.75	362311AG7	Deb 'F'	05/15/2027	A-	6.32	6.25	6.26	6.23	5.81	5.98	5.71	5.49	5.06	5.59	5.56	5.31	5.80%	5.49%	
GTE Corp	8.75	362320AT0	Deb	11/01/2021	A-	5.23	5.11	5.14	4.99	4.46	4.54	4.15	3.84	3.88	3.76	4.03	3.82	4.41%	3.87%	
GTE Corp	6.84	362320AZ6	Deb	04/15/2018	A-	4.43	4.09	4.24	4.19	3.88	4.10	3.68	3.56	3.49	3.29	3.34	3.32	3.80%	3.32%	
GTE Corp	6.94	362320BA0	Deb	04/15/2028	A-	5.97	5.80	5.91	5.88	5.39	5.56	5.27	5.34	4.88	4.73	4.90	4.66	4.56	5.36%	4.76%
GTE Florida	6.86	362333AH9	Deb 'E'	02/01/2028	A-	6.62	6.30	6.26	6.23	6.00	6.12	5.88	5.59	5.17	5.86	6.03	5.16	5.94%	5.68%	
Indiana Bell Telephone	7.3	454614AK4	Deb	08/15/2026	A-	5.98	5.91	5.99	5.89	5.64	5.83	5.93	5.61	5.58	5.53	5.59	5.27	5.73%	5.46%	
Michigan Bell Telephone	7.85	594185AQ3	Deb	01/15/2022	A-	5.88	5.71	5.89	5.84	5.05	5.12	4.88	4.56	4.54	4.56	4.42	4.37	5.07%	4.45%	
New England Tel. & Tel.	7.88	644239AY1	Deb	11/15/2029	A-	6.57	6.40	6.41	6.38	6.08	6.44	5.83	5.70	5.64	5.86	6.12	5.91	6.11%	5.96%	
New Jersey Bell Tel	7.85	645767AW4	Deb	11/15/2029	A-	6.72	6.45	6.41	6.38	5.87	6.10	5.83	5.90	5.64	5.66	6.03	5.91	6.08%	5.87%	
New Jersey Bell Tel	8	645767AY0	Deb	06/01/2022	A-	5.63	5.66	5.69	5.64	5.43	5.61	5.16	4.86	4.78	4.93	4.95	4.72	5.26%	4.87%	
New York Telephone Co	7	650094BT1	Deb	05/01/2013	A-	2.08	2.11	1.99	1.90	1.82	2.01	1.88	1.88	2.54	2.60	2.66	1.49	2.08%	2.25%	
New York Telephone Co	7	650094BV6	Deb	06/15/2013	A-	2.08	2.11	1.99	1.90	1.82	2.01	1.88	1.88	2.54	2.60	2.66	1.49	2.08%	2.25%	
New York Telephone Co	6.7	650094CA1	Deb	11/01/2023	A-	6.13	6.14	6.19	6.15	5.83	5.86	5.86	5.86	6.14	6.15	6.17	6.18	6.06%	6.17%	
New York Telephone Co	7	650094CB9	Deb	12/01/2033	A-	6.93	6.75	6.71	6.68	6.44	6.44	6.44	6.44	6.69	6.69	6.48	6.62%	6.62%		
New York Telephone Co	6.5	650094CJ2	Deb	04/15/2028	A-	6.32	6.25	6.26	6.23	5.95	6.12	5.88	5.78	5.37	5.51	5.47	5.56	5.89%	5.51%	

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Pacific Bell	7.125	694032AT0	Deb	03/15/2026	A-	5.68	5.66	5.79	5.74	5.20	5.37	6.11	4.76	4.76	4.66	4.73	4.62	5.26%	4.67%	
Pacific Bell	7.375	694032AV5	Deb	07/15/2043	A-	7.31	6.83	6.96	6.98	6.81	6.95	6.81	7.08	6.76	6.93	6.78	6.77	6.91%	6.83%	
Pacific Bell	6.625	694032AX1	Deb	10/15/2034	A-	6.68	6.64	6.54	6.51	6.27	6.27	6.11	6.32	6.30	6.49	6.34	6.16	6.39%	6.33%	
SBC Communications Inc.	5.875	78387GAH6	Global Nts	02/01/2012	A-	0.69	0.66	0.66	0.58	0.02	0.27	0.53	1.13	1.62			2.56	0.87%	2.56%	
SBC Communications Inc.	5.88	78387GAK9	Global Nts	08/15/2012	A-	0.88	0.93	0.99	0.85	0.02	0.27	0.53	1.13	1.62			0.68	0.79%	0.68%	
SBC Communications	5.62	78387GAL7	GlobalNts	06/15/2016	A-	3.08	3.14	3.11	3.06	2.71	2.73	2.34	2.56	2.61	2.38	2.51	2.14	2.70%	2.34%	
SBCCommunications	6.45	78387GAM5	GlobalNts	06/15/2034	A-	6.12	6.03	6.16	6.05	5.78	5.90	5.51	5.42	5.29	4.97	5.34	4.94	5.63%	5.08%	
SBCCommunications	6.45	78387GAM5	Gbl Nt	6/15/2034	A-	6.12	6.03	6.16	6.05	5.78	5.90	5.51	5.42	5.29	4.97	5.34	4.94	5.63%	5.08%	
SBCCommunications	6.15	78387GAQ6	Gbl Nt	9/15/2034	A-	6.08	5.97	6.13	6.05	5.73	5.86	5.47	5.44	5.25	4.93	5.22	4.79	5.58%	4.98%	
Southwest'n Bell Tel	7	845335BQ0	Deb	07/01/2015	A-	3.30	3.04	3.06	2.96	2.44	2.51	2.22	2.41	2.59	2.40	2.54	2.00	2.62%	2.31%	
Verizon Communications Inc.	5.55	92343VAC8	Nts	02/15/2016	A-	2.95	3.04	3.06	3.01	2.78	2.80	2.29	1.97	1.85	1.85	2.00	1.89	2.46%	1.91%	
Verizon Communications Inc.	6.25	92343VAF1	Nts	04/01/2037	A-	5.90	5.95	6.06	5.88	5.64	5.78	5.39	5.27	4.88	4.87	4.88	4.66	5.43%	4.80%	
Verizon Communications Inc.	5.5	92343VAG9	Nts	04/01/2017	A-	3.55	3.63	3.56	3.41	3.12	3.22	2.66	2.72	2.93	2.60	2.45	2.29	3.01%	2.45%	
Verizon Global Fndg	6.875	92344GAQ9	Nts	06/15/2012	A-	0.99	1.04	0.99	0.85	0.41	1.02	1.38	2.13	2.72	3.01	0.40		1.08%	0.20%	
Verizon Global Fndg	7.75	92344GAS5	Nts	06/15/2032	A-	5.99	5.85	5.94	5.88	5.59	5.76	5.34	5.22	4.86	4.78	5.05	4.76	5.42%	4.86%	
Verizon Global Fndg	7.375	92344GAT3	Nts	09/01/2012	A-	1.04	1.09	1.04	0.99	0.02	0.02	0.13	0.96	1.56	1.91	2.08	2.08	1.08%	2.02%	
Verizon Global Fndg	4.375	92344GAV8	Nts	06/01/2013	A-	1.25	1.25	1.29	1.31	1.04	1.24	1.25	1.44	1.55	1.65	1.78	0.97	1.34%	1.47%	
Verizon Global Fndg	4.9	92344GAW6	Nts	09/15/2015	A-	2.58	2.72	2.71	2.56	1.94	2.05	1.65	1.52	1.73	1.79	1.83	1.49	2.05%	1.70%	
Verizon Global Fndg	5.85	92344GAX4	Nts	09/15/2035	A-	5.82	5.79	5.91	5.74	5.49	5.64	5.22	5.05	4.64	4.49	4.81	4.50	5.26%	4.60%	
Verizon New England	4.75	92344RAB8	Deb 'C'	10/01/2013	A-	2.07	2.20	2.09	1.96	1.29	1.40	1.41	1.58	1.76	1.88	2.05	1.81	1.79%	1.91%	
Verizon NJ	5.875	92344UAA3	Deb 'A'	01/17/2012	A-	0.89	0.86	0.81	0.73	2.55	3.04	3.44						1.76%		
Verizon Maryland	5.125	92344WAB7	Deb'B'	06/15/2033	A-	6.32	5.89	5.91	5.83	5.51	5.67	5.47	5.42	5.00	4.93	4.90	4.78	5.47%	4.87%	
Verizon Virginia	4.625	92345NAAB	Deb 'A'	03/15/2013	A-	1.82	1.70	1.74	1.60	1.69	1.82	1.74	2.00	2.29	0.35	0.73	1.18	1.56%	0.75%	
Vodafone Group Plc	5.75	92857WAK6	Notes	03/15/2016	A-	3.09	3.24	3.16	3.07	2.59	2.90	2.46	2.61	2.71	1.95	2.11	2.11	2.67%	2.06%	
Vodafone Group Plc	5.62	92857WAP5	Notes	02/27/2017	A-											2.17	2.46	2.41	2.35%	2.35%
Vodafone Group Plc	6.15	92857WAC3	Notes	02/27/2037	A-											4.52	4.50	4.70	4.57%	4.57%
Vodafone Group Plc	5.35	92857WAR1	Notes	02/27/2012	A-											0.90	1.29	1.15	1.11%	1.11%
Wisconsin Bell Inc	6.35	976585AG4	Deb	12/01/2026	A-	6.87	6.79	6.86	6.83	6.56	6.69	6.42	6.08	5.73	5.62	5.64	5.46	6.30%	5.57%	
BellSouthTelecommunications	7		Deb	12/15/2095	A-	6.83	6.76	6.87	6.61	6.42	6.66	6.27	6.22	5.90	5.73	5.88	5.56	6.31%	5.72%	
AT&T Broadband	8.38	00209TAA3	Nts	03/15/2013	BBB+	1.68	1.67	1.67	1.50	1.29	1.09	1.09	1.19	1.41	0.02	0.02	1.06	1.14%	0.37%	
AT&T Broadband	9.46	00209TAB1	Nts	11/15/2022	BBB+	5.26	5.25	5.24	5.07	4.81	4.66	4.66	4.13	4.27	4.37	4.86	4.47	4.75%	4.57%	
TCI Communications	8.75	872287AC1	Sr Deb	08/01/2015	BBB+	3.11	3.36	3.41	3.26	2.60	2.68	2.36	2.83	2.88	2.54	2.83	2.45	2.86%	2.61%	
TCI Communications	7.875	872287AF4	Sr Deb	02/15/2026	BBB+	5.61	5.71	5.83	5.59	5.12	5.12	4.95	4.46	4.95	4.81	5.00	4.70	5.15%	4.84%	
TCI Communications	7.125	872287AL1	Sr Nts	02/15/2028	BBB+	6.06	5.97	5.86	5.82	5.51	5.66	5.42	5.22	5.05	5.00	5.20	5.06	5.49%	5.09%	
Tele-Communications(Old)	9.8	879240AN9	Sr Deb	02/01/2012	BBB+	1.54	1.11	0.44	0.75	3.60	4.40	5.12					2.00	2.37%	2.00%	
Tele-Communications(Old)	10.125	879240AQ2	Sr Deb	04/15/2022	BBB+	5.85	5.54	5.66	5.62	5.27	5.42	5.07	4.90	4.93	4.51	4.78	4.60	5.18%	4.63%	
Tele-Communications(Old)	7.88	879240AX7	Sr Deb	08/01/2013	BBB+	2.04	2.20	2.32	1.78	1.15	1.38	1.46	1.61	2.13	2.22	2.70	1.44	1.87%	2.12%	
Tele-Communications(Old)	9.88	879240AR0	Sr Deb	06/15/2022	BBB	5.78	5.83	5.96	5.91	5.27	5.42	4.93	4.86	4.88	4.78	5.03	4.60	5.27%	4.80%	
Carolina Tel. & Tel	6.75	144195AN4	Deb	08/15/2013	BBB-	3.82	3.70	3.74	3.66	3.22	3.08	3.08	3.54	4.21	4.27	4.38	4.26	3.75%	4.30%	
Centel Capital	9	15133KAC7	Deb	10/15/2019	BBB-	6.88	6.66	6.44	6.64	5.96	6.22	6.22	6.54	6.80	6.81	6.73	6.87	6.56%	6.80%	
Mountain States Tel&Tel	7.38	624284BD6	Deb	05/01/2030	BBB-	7.57	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52	7.52%	7.52%	
Northwestern Bell Tel	7.75	668027AT2	Deb	05/01/2030	BBB-	7.69	7.61	7.61	7.17	6.91	7.05	6.83	6.81	7.00	7.11	6.93	6.80	7.13%	6.95%	
Qwest Corp	7.5	74913GAG0	Nts	10/01/2014	BBB-	3.33	3.19	3.09	3.15	2.76	3.20	2.91	3.66	4.59	4.02	4.01	3.59	3.46%	3.87%	
Qwest Corp	7.62	74913GAK1	Nts	06/15/2015	BBB-	3.86	3.86	3.67	3.91	3.59	4.05	3.54	4.49	5.62	4.74	4.83	4.23	4.20%	4.60%	
Qwest Corp	3.56	74913GAN5	Nt Fltg Rate	6/15/2013	BBB-	1.50	1.54	1.59	1.75							3.43	3.42	3.59	3.40%	
Qwest Corp	6.5	74913GAT2	Nts	06/01/2017	BBB-	4.61	4.63	4.57	4.41	4.33	4.83	4.65	5.10	5.84	5.24	5.12	4.55	4.82%	4.97%	
TCA Cable TV	6.53	872241AB0	Deb	02/01/2028	BBB-	6.34	6.31	6.43	6.39	6.08	6.03	5.78	5.42	5.37	5.66	5.83	5.85	5.96%	5.78%	
United States Cellular Corp.	6.7	911684AD0	Sr Nts	12/15/2033	BBB-	7.07	6.91	7.11	6.81						7.12	6.70	6.66	6.91%	6.83%	
U S WESTCommunications	7.5	912920AB1	Deb	06/15/2023	BBB-	7.46	7.45	7.46	7.44	7.49	7.54	7.69	7.69	7.54	7.49	7.49	7.52%	7.51%		
U S WESTCommunications	6.875	912920AC9	Deb	09/15/2033	BBB-	6.96	6.90	6.89	7.00	7.03	7.20	6.95	7.25	7.39	6.93	7.05	6.93	7.04%	6.97%	
U S WESTCommunications	7.125	912920AG0	Deb	11/15/2043	BBB-	7.38	7.38	7.32	7.18	7.31	7.54	7.39	7.71	7.37	7.37	7.39	7.37	7.39%	7.38%	
U S WESTCommunications	7.25	912920AK1	Deb	09/15/2025	BBB-	6.49	6.65	6.59	6.75	6.49	6.86	6.71	7.37	7.66	7.20	6.95	6.21	6.83%	6.79%	
U S WESTCommunications	7.2	912920AL9	Deb	11/10/2026	BBB-	7.30	7.22	7.19	7.14	7.15	7.42	7.20	7.42	7.78	7.37	7.37	7.22	7.32%	7.32%	
U S WESTCommunications	7.25	912920AM7	Deb	10/15/2035	BBB-	7.16	7.24	7.20	7.11	7.15	7.34	7.22	7.81	7.61	7.34	7.43	7.27	7.32%	7.35%	
United Tel Co(Florida)	6.875	913026AS9	1st FF	07/15/2013	BBB-	3.72	3.70	2.99	2.90	2.73	2.77	2.83	3.42	4.20	3.96	4.31	3.77	3.44%	4.01%	
United Tel Co(Florida)	8.375	913026AT7	1st HH	01/15/2025	BBB-	7.92	7.40	7.19	7.14	7.05	7.08	6.73	6.69	7.05	6.91	6.87	7.09%	6.94%		

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
United Tel Co(Florida)	7.125	913026AU4	1st GG	07/15/2023	BBB-	6.73	6.51	6.44	6.39	6.30	6.30	5.95	6.47	6.83	6.69	6.83	6.87	6.53%	6.80%	
Aliant Communications	6.75	016090AA0	Nts	04/01/2028	BB+	7.71	7.63	7.86	7.83	7.37	7.31	7.51	7.00	7.25	7.10	6.91	7.40%	7.09%		
Century Tel Enterpr	7.2	156686AJ6	Sr Nts 'D'	12/01/2025	BB	7.32	7.00	6.81	6.89	6.76	6.97	6.97	7.09	7.35	7.25	7.08	7.12	7.05%	7.15%	
Century Tel Enterpr	6.875	156686AM9	Deb 'G'	01/15/2028	BB	7.22	6.95	6.76	6.98	7.02	7.36	7.36	8.26	7.90	8.20	8.16	7.61	7.48%	7.99%	
CenturyTel, Inc.	7.875	156700AG1	Sr Nts 'L'	08/15/2012	BB	2.43	2.43	2.44	2.40	2.01	2.08	2.08	2.55	3.60	2.51	2.08	2.59	2.43%	2.39%	
CenturyTel, Inc.	5	156700AJ5	Sr Nts 'M'	02/15/2015	BB	3.95	3.88	3.66	3.66	3.48	3.59	3.59	4.50	5.09	4.94	4.65	4.58	4.13%	4.72%	
CenturyTel, Inc.	5.5	156700AK2	Sr Nts 'O'	04/01/2013	BB	3.57	3.45	3.49	2.76	2.82	2.43	2.43	3.04	3.71	3.65	3.76	3.76	3.24%	3.72%	
CenturyTel, Inc.	6	156700AL0	Sr Nts 'N'	04/01/2017	BB	5.05	4.88	4.66	4.71	4.68	4.94	4.94	5.45	6.14	5.34	5.65	5.68	5.18%	5.56%	
Citizens Communications Co.	9	17453BAJ0	Sr Nts	08/31/2031	BB	8.38	8.45	8.73	8.68	8.57	8.81	8.81	9.65	10.02	9.22	10.44	10.02	9.15%	9.89%	
GTE North Inc	6.73	362337AK3	Deb 'G'	02/15/2028	BB	7.32	7.24	7.26	7.23	6.95	7.37	7.13	6.61	8.86	10.81	10.87	10.61	8.19%	10.76%	
Qwest Communications Internation	7.5	749121BR9	Sr Nts 'B'	02/15/2014	BB	6.94	6.92	6.91										7.29	7.02%	
Qwest Communications Internation	7.5	749121BV0	Sr Nts 'B'	02/15/2014	BB	6.94	6.92	6.91										7.29	7.29%	
Qwest Cap Funding	7.75	74913EAJ9	Nts	02/15/2031	BB	7.43	7.36	7.17	7.08	7.27	7.53	7.52	8.61	8.52	7.96	7.96	7.81	7.69%	7.91%	
Qwest Cap Funding	7.62	74913EAQ3	Nts	08/03/2021	BB	7.48	7.20	7.13	6.98	7.20	6.64	5.98	6.87	7.13	8.22	8.27	7.33	7.20%	7.94%	
U S WEST Cap Fndg	6.88	912912AQ8	Deb	07/15/2028	BB	7.17	7.07	6.97	7.02	7.22	7.34	7.25	7.74	8.39	8.15	8.03	7.52	7.49%	7.90%	
U S WEST Cap Fndg	6.5	912912AR3	Deb	11/15/2018	BB	6.33	6.12	6.12	5.99	5.93	6.22	6.15	6.44	7.25	7.15	6.83	6.73	6.44%	6.90%	
Cin Bell Tel	7.25	171870AK4	Sec Nts	06/15/2023	BB-	8.79	9.32	10.30	10.06	7.90	8.89	8.89	9.00	8.99	9.84	9.84	9.82	9.30%	9.83%	
Cincinnati Bell Tel	6.3	171875AD9	<SB>(Tel)<EB>	12/01/2028	BB-	8.43	8.63	8.50	8.19	8.04	8.36	8.36	9.07	8.53	9.49	9.27	9.10	8.66%	9.29%	
NEXTTEL Communications, Inc.	7.38	65332VBD4	Sr Nts	08/01/2015	B+	7.17	7.30	7.20	7.16	7.20	7.37	7.37	7.86	8.99	8.76	11.26	10.26	8.16%	10.09%	
Sprint Capital	6.88	852060AD4	Nts	11/15/2028	B+	7.93	7.91	7.62	7.25	7.19	7.39	7.39	8.03	10.03	10.30	10.84	10.53	8.54%	10.56%	
Sprint Capital	6.9	852060AG7	Nts	05/01/2019	B+	6.85	6.75	6.33	6.08	6.17	6.42	6.54	7.54	9.47	10.05	11.86	10.41	7.87%	10.77%	
Sprint Capital	8.38	852060AS1	Nts	03/15/2012	B+	2.67	2.41	2.27	2.31	3.45	4.21	4.45	5.21	7.31					8.17	4.25%
Sprint Capital	8.75	852060AT9	Nts	03/15/2032	B+	8.33	8.34	8.09	7.77	7.74	7.93	7.93	8.49	10.30	10.86	11.32	11.14	9.02%	11.11%	
Sprint Nextel Corp.	9.25	852061AA8	Deb	04/15/2022	B+	8.37	8.44	8.47	7.90	7.61	8.25	8.25	8.74	9.10	8.89	9.99	10.15	8.68%	9.68%	
Sprint Nextel Corp.	6	852061AD2	Nt	12/1/2016	B+	6.38	6.04	5.78	5.55	5.65	6.03	6.00	6.91	9.66	8.98	12.20	10.51	7.47%	10.56%	
Windstream Corp.	8.12	97381WAC8	SrNts	08/01/2013	B+	3.88	3.71	3.67	3.69									3.81	3.86%	
Windstream Corp.	8.62	97381WAD6	SrNts	08/01/2016	B+	7.28	7.31	7.30	7.31									7.47	7.37%	
Windstream Corp.	7	97381WAF1	SrNts	03/15/2019	B+	7.08	6.99	6.93	6.72	6.47	6.83	6.71	7.34	7.69	6.82	7.81	6.81	7.02%	7.15%	
Cincinnati Bell Tel	7	171871AH9	Sr Nts	02/15/2015	B	6.64	6.41	6.62	6.46	6.42	6.56	6.56	7.49	7.67	6.56	7.61	6.86	6.82%	7.01%	
Level 3 Finan	12.25	527298AF0	SrNts	03/15/2013	CCC	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84%	9.84%	
Level 3 Finan	9.25	527298AM5	SrNts	11/01/2014	CCC	8.84	8.20	8.50	7.88	8.08	8.13	8.15	8.76	9.75	8.42	8.52	8.33	8.46%	8.42%	
AT&T Corp.	7.3	001957BC2	Sr Nts	11/15/2011	NR	0.67	0.74	0.50	0.51	0.70	0.57	0.57	0.91	0.70				0.65%		
ALLTEL Corp.	7.88	020039DC4	Sr Nt	7/1/2032	NR	5.65	5.50	5.51	5.48	5.22	5.16	5.16	5.01	4.55	4.66	4.76	4.61	5.11%	4.68%	
BellSouth Corp.	6	079860AB8	Nts	10/15/2011	NR	0.50	0.66	0.59	0.55	0.69	0.51	0.51	0.74					0.59%		
Centennial Com/Cell Op/PR	8.12	151352AB7	Sr Nts	02/01/2014	NR	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95%	6.95%	
Centennial Commun/Oper Co	10.12	15135EAB1	GtdSr Nts	06/15/2013	NR	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02	9.02%	9.02%	
Cincinnati Bell Tel	8.38	171871AE6	Sub Sr Nts	01/15/2014	NR	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54%	7.54%	
Cingular Wireless LLC	6.5	17248RAF3	Sr Nt	12/15/2011	NR	0.53	0.62	0.56	0.48	0.66	0.75	0.75	0.96	0.62				0.66%		
Cingular Wireless LLC	7.12	17248RAJ5	Sr Nt	12/15/2031	NR	5.72	5.60	5.76	5.58	5.27	5.21	5.21	5.01	4.65	4.86	5.03	4.81	5.23%	4.90%	
Crown Castle International Corp.	10.75	228227AJ3	Sr Nts	08/01/2011	NR	9.53	9.53	9.53	9.53	9.53	9.53	9.53						9.53%		
Crown Castle International Corp.	9.38	228227AS3	Sr Nts	08/01/2011	NR	7.16	7.16	7.16	7.16	7.16	7.16	7.16						7.16%		
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	NR	6.92	6.85	6.81	7.00									7.66	7.66%	
Embarq Corp.	7.08	29078EAB1	Nts	06/01/2016	NR	4.15	4.13	4.11	4.11									4.94	4.29%	
Embarq Corp.	6.74	29078EAC9	Nts	06/01/2013	NR	2.77	2.71	2.64	2.25									3.77	2.83%	
Qwest Corp	8.88	74913GAC9	Nts	03/15/2012	NR	1.86	1.73	1.74	1.69	3.33	3.45	4.18	5.32	5.32				3.18%		
Qwest Corp	7.88	74913GAE5	Nts	09/01/2011	NR	1.39	1.67	1.85	1.95									1.72%		
SBC Communications Capital	7	78387QAB7	MTN Tranche #	10/1/2012	NR	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81%	6.81%	
Time Warner Tel Hldgs	9.25	88732AAD9	Sr Nts	02/15/2014	NR	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34	8.34%	8.34%
Verizon New England	6.5	92344RAA0	Deb 'A'	09/15/2011	NR	0.79	0.73	0.57	0.36									0.61%		
Verizon Pennsylvania	5.65	92344TAA6	Deb 'A'	11/15/2011	NR	0.75	0.81	0.70	0.42									0.67%		

Counts of data

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
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NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
A's	4.31%	4.02%
BBB's	5.26%	5.26%
BB's	6.77%	7.27%
B's	7.19%	8.78%
CCC's	9.15%	9.13%
NR's	4.63%	6.46%
ALL	5.02%	5.19%
BBB- & Above	5.02%	5.19%
BB- & Above	4.84%	4.72%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Telecommunications
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
20 YEAR PLUS - BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
GTE Southwest	8.5	362338AQ8	1st	11/15/2031	A+	6.67	6.45	6.46	6.43	6.12	6.25	5.78	5.49	5.17	5.37	5.32	5.16	5.89%	5.28%
AT&T Corp.	8	001957BD0	Sr Nts	11/15/2031	A-	5.87	5.75	5.86	5.68	5.32	5.26	5.26	5.21	4.84	4.68	5.22	4.76	5.31%	4.89%
AT&T Inc.	6.8	00206RAB8	Nts	05/15/2036	A-	6.14	6.03	6.20	6.14	5.78	5.82	5.82	5.61	5.19	5.20	5.13	4.91	5.66%	5.08%
AT&T Inc.	6.5	00206RAD4	GlobalNts	09/01/2037	A-	6.09	6.01	6.17	6.06	5.79	5.81	5.81	5.56	5.17	5.02	5.09	4.82	5.62%	4.98%
AT&T Inc.	6.3	00206RAG7	GlobalNts	01/15/2038	A-	6.06	6.01	6.16	6.06	5.79	5.79	5.79	5.56	5.17	5.02	5.08	4.76	5.60%	4.95%
AT&T Inc.	6.4	00206RAN2	GlobalNts	05/15/2038	A-	6.08	6.06	6.18	6.06	5.81	5.80	5.80	5.61	5.17	5.02	5.14	4.81	5.63%	4.99%
AT&T Wireless Services	8.75	00209AAF3	Sr Nts	03/01/2031	A-	5.71	5.56	5.63	5.48	5.14	5.16	5.16	5.16	4.66	4.83	5.05	4.93	5.21%	4.94%
Bell Tel. of Penna	8.75	078167BA0	Deb	8/15/2031	A-	7.17	6.85	6.86	6.83	6.22	6.16	6.16	5.81	5.35	5.47	5.54	6.11	6.21%	5.71%
BellSouth Corp.	6.875	079860AD4	Nts	10/15/2031	A-	6.12	6.00	6.11	6.03	5.57	5.71	5.71	5.26	4.88		5.34	4.91	5.60%	5.13%
BellSouth Corp.	6.55	079860AE2	Nts	06/15/2034	A-	6.22	6.15	6.21	6.13	5.72	5.81	5.81	5.61	5.28	5.12	5.34	5.11	5.71%	5.19%
BellSouth Corp.	6	079860AK6	Nts	11/15/2034	A-	6.12	6.00	6.16	6.13	5.72	5.76	5.76	5.56	5.28	5.03	5.25	5.00	5.65%	5.09%
BellSouthTelecommunications	5.85	079867AN7	Deb	11/15/2045	A-	6.72	6.59	6.61	6.58	6.22	6.16	6.16	6.01	5.55	5.64	5.46	6.11%	5.58%	
Chesapeake Pot.Tel Md	8.3	165069AQ8	Deb	8/1/2031	A-	7.32	7.10	7.11	6.93	6.32	6.26	6.26	5.91	5.45	5.69	5.64	6.21	6.35%	5.85%
New York Telephone Co	7	650094CB9	Deb	12/01/2033	A-	6.93	6.75	6.71	6.68	6.44	6.44	6.44	6.44	6.69	6.69	6.48	6.62%		
Pacific Bell	7.375	694032AV5	Deb	07/15/2043	A-	7.31	6.83	6.96	6.98	6.81	6.95	6.81	7.08	6.76	6.93	6.78	6.77	6.91%	6.83%
Pacific Bell	6.625	694032AX1	Deb	10/15/2034	A-	6.68	6.64	6.54	6.51	6.27	6.27	6.11	6.32	6.30	6.49	6.34	6.16	6.39%	6.33%
SBCCommunications	6.45	78387GAM5	GlobalNts	06/15/2034	A-	6.12	6.03	6.16	6.05	5.78	5.90	5.51	5.42	5.29	4.97	5.34	4.94	5.63%	5.08%
SBCCommunications	6.45	78387GAM5	Gbl Nt	6/15/2034	A-	6.12	6.03	6.16	6.05	5.78	5.90	5.51	5.42	5.29	4.97	5.34	4.94	5.63%	5.08%
SBCCommunications	6.15	78387GAQ6	Gbl Nt	9/15/2034	A-	6.08	5.97	6.13	6.05	5.73	5.86	5.47	5.44	5.25	4.93	5.22	4.79	5.58%	4.98%
Verizon Communications Inc.	6.25	92343VAF1	Nts	04/01/2037	A-	5.90	5.95	6.06	5.88	5.64	5.78	5.39	5.27	4.88	4.87	4.88	4.66	5.43%	4.80%
Verizon Global Fnfdg	7.75	92344GAS5	Nts	06/15/2032	A-	5.99	5.85	5.94	5.88	5.59	5.76	5.34	5.22	4.86	4.78	5.05	4.76	5.42%	4.86%
Verizon Global Fnfdg	5.85	92344GAX4	Nts	09/15/2035	A-	5.82	5.79	5.91	5.74	5.49	5.64	5.22	5.05	4.64	4.49	4.81	4.50	5.26%	4.60%
Verizon Maryland	5.125	92344WAB7	Deb'B'	06/15/2033	A-	6.32	5.89	5.91	5.83	5.51	5.67	5.47	5.42	5.00	4.93	4.90	4.78	5.47%	4.87%
Vodafone Group Plc	6.15	92857WAQ3	Notes	02/27/2037	A-										4.52	4.50	4.70	4.57%	4.57%
BellSouthTelecommunications	7		Deb	12/15/2095	A-	6.83	6.76	6.87	6.61	6.42	6.66	6.27	6.22	5.90	5.73	5.88	5.56	6.31%	5.72%
United States Cellular Corp.	6.7	911684AD0	Sr Nts	12/15/2033	BBB-	7.07	6.91	7.11	6.81						7.12	6.70	6.66	6.91%	6.83%
U S WESTCommunications	6.875	912920AC9	Deb	09/15/2033	BBB-	6.96	6.90	6.89	7.00	7.03	7.20	6.95	7.25	7.39	6.93	7.05	6.93	7.04%	6.97%
U S WESTCommunications	7.125	912920AG0	Deb	11/15/2043	BBB-	7.38	7.38	7.32	7.18	7.31	7.54	7.39	7.71	7.37	7.37	7.39	7.37	7.39%	7.38%
U S WESTCommunications	7.25	912920AM7	Deb	10/15/2035	BBB-	7.16	7.24	7.20	7.11	7.15	7.34	7.22	7.81	7.61	7.34	7.43	7.27	7.32%	7.35%
Citizens Communications Co.	9	17453BAJ0	Sr Nts	08/31/2031	BB	8.38	8.45	8.73	8.68	8.57	8.81	8.81	9.65	10.02	9.22	10.44	10.02	9.15%	9.89%
Qwest Cap Funding	7.75	74913EAJ9	Nts	02/15/2031	BB	7.48	7.36	7.17	7.08	7.27	7.53	7.52	8.61	8.52	7.96	7.81	7.69%	7.91%	
Sprint Capital	8.75	852060AT9	Nts	03/15/2032	B+	8.33	8.34	8.09	7.77	7.74	7.93	7.93	8.49	10.30	10.86	11.32	11.14	9.02%	11.11%
ALLTEL Corp	7.88	020039DC4	Sr Nt	7/1/2032	NR	5.65	5.50	5.51	5.48	5.22	5.16	5.16	5.01	4.55	4.66	4.76	4.61	5.11%	4.68%
Cingular Wireless LLC	7.12	17248RAJ5	Sr Nt	12/15/2031	NR	5.72	5.60	5.78	5.58	5.27	5.21	5.21	5.01	4.65	4.86	5.03	4.81	5.23%	4.90%
Embarq Corp.	8	29078EAA3	Nts	06/01/2036	NR	6.92	6.85	6.81	7.00							7.66	7.05%	7.66%	

Counts of data

33 33 33 33 31 31 31 31 31 31 32 33 34 34 34

NOTES:

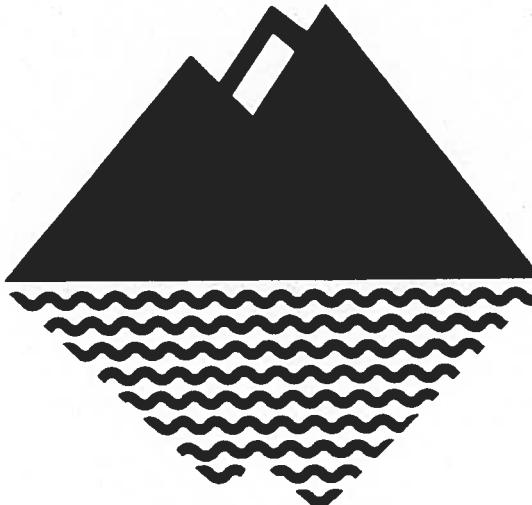
Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
A's	5.75%	5.28%
BBB's	7.17%	7.13%
BB's	8.42%	8.90%
B's	9.02%	11.11%
NR's	5.79%	5.75%
ALL	6.16%	5.90%
BBB- & Above	5.95%	5.54%
BB- & Above	8.42%	8.90%

*Investment Grade (BBB- & Above)



Montana Department of
REVENUE

2012 Capitalization Rate Study

Liquid Pipelines

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study
Industry: Liquid Pipelines
2012 Assessment Year

Equity Measures Calculated:

E/P estimates:

All	B+ to B++	Median	
3.68%	3.05%	3.89%	Yahoo
4.74%	4.73%	5.01%	Value Line
4.21%	3.89%	4.45%	Average of E/Ps

Inverse of P/E Ratios:

3.64%	2.91%	3.85%	Yahoo
4.68%	4.59%	5.00%	Value Line
4.16%	3.75%	4.43%	Average of Inverse of the P/E
5.37%	5.27%	5.88%	Inverse of median P/E, Value Line
4.19%	3.82%	4.44%	Average of all above except median P/E

Mean = 4.42% 4.11% 4.73%

Median = 4.68% 4.59% 5.00%

Equity Measure NUOI = 5.50%

Debt Measure Calculated, Current Yield:

	Annual	4th Qtr	
	6.37%	6.11%	ALL
	5.95%	5.79%	BBB- & Above
	6.14%	5.97%	BB- & Above
Mean =	6.15%	5.95%	
Median =	6.14%	5.97%	

Debt Measure = 6.11%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate					
Equity	71.00%	x	5.50%	=	3.91%
Debt	29.00%	x	6.11%	=	1.77%
	100.00%				5.68%
Direct Cap Rate NUOI =					5.75%

Gross Cash Flow / Price:

All	B+ to B++	Median	
7.95%	7.97%	7.36%	Value Line

Equity Measure GCF = 8.50%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)					
Equity	71.00%	x	8.50%	=	6.04%
Debt	29.00%	x	6.11%	=	1.77%
	100.00%				7.81%
Direct Cap Rate GCF =					8.00%

MONTANA DEPARTMENT OF REVENUE

Yield Capitalization Rate Study Industry: Liquid Pipelines 2012 Assessment Year

Equity Measures Calculated:

	All
Dividend Growth Model	11.25%
Capital Asset Pricing Model	8.08%
Mean =	9.67%
Median =	9.67%

Equity Measure FCF = **8.50%**

Debt Measures Calculated, Yield to Maturity:

	ALL DEBT		20 YEAR PLUS DEBT	
	Annual	4th Qtr	Annual	4th Qtr
ALL	4.71%	4.38%	5.78%	5.33%
BBB- & Above	4.20%	3.79%	5.70%	5.24%
BB- & Above	4.48%	4.09%	5.79%	5.33%
Mean =	4.46%	4.09%	5.76%	5.30%
Median =	4.48%	4.09%	5.78%	5.33%

Debt Measure = **4.50%**

Yield Cap Rate Free Cash Flow - Gas Pipelines				
Equity	71.00%	x	8.50%	= 6.04%
Debt	29.00%	x	4.50%	= 1.31%
	100.00%			7.34%
Weighted Average Cost of Capital (WACC) =				7.50%

Assumed Growth Rate = Inflation
see appendix for calculation

Growth = **2.05%**

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Liquid Pipelines
2012 Assessment Year

Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares	(YAHOO) Avg. Price Common	(VL) Book Value Per Share	Mkt. Value Common ExD	(VL) Book Value Common	(VL) Book Value Preferred	(VL) Book Value Debt	Mkt/Book Debt Ratio	Mkt. Value Pref. & Debt	(YAHOO) EPS last 12mo
Enbridge Energy Partners LP	EEP	B++	209,100	29.86	16.36	6,243,029	3,420,100	0	5,114,700	1.00	5,114,700	1.01
Magellan Midstream Partners LP	MMP	B++	112,500	63.88	13.06	7,186,313	1,469,600	0	1,906,100	1.00	1,906,100	3.47
Nustar Energy LP	NS	B++	64,600	55.15	40.95	3,562,367	2,645,400	0	2,136,200	1.00	2,136,200	3.14
Sunoco Logistics Partners L.P.	SXL	B++	99,300	88.40	9.44	8,777,955	937,000	0	1,229,000	1.00	1,229,000	2.42
Buckeye	BPL	B+	71,400	63.99	19.75	4,569,005	1,410,300	0	1,519,400	1.00	1,519,400	0.72
Enterprise Products	EPD	B+	843,700	44.09	13.48	37,200,139	11,374,200	0	13,281,200	1.00	13,281,200	1.94
Kinder Morgan Egy Ptnrs L.P.	KMP	B+	316,100	76.45	22.04	24,164,791	6,966,400	244,300	10,277,400	1.00	10,521,700	0.14
Plains All American PL LP	PAA	B+	141,200	64.89	32.39	9,162,468	4,573,000	0	4,631,000	1.00	4,631,000	4.21

SUMS & AVGS - ALL COMPANIES

100,866,067 32,796,000 244,300 40,095,000 40,339,300

SUMS & AVGS - B++ COMPANIES

25,769,663 8,472,100 0 10,386,000 10,386,000

SUMS & AVGS - B COMPANIES

75,096,404 24,323,900 244,300 29,709,000 29,953,300

MEDIAN - ALL COMPANIES

* All Negative values left out of calculations

INDUSTRY MARKET STRUCTURE

	ALL COMPANIES		B COMPANIES	
EQUITY	71.00%	100,866,067	71.00%	75,096,404
DEBT	29.00%	40,583,600	29.00%	30,197,600
TOTAL	100.00%	141,449,667	100.00%	105,294,004

Notes/Rational for Changes to Guideline Companies

2012

The Guideline Companies were reviewed and some additional companies were added to be more comparable with companies in Montana, while Exxon Mobil and Conoco Phillips were removed since they are vertically integrated companies.

The addlons include:

Sunoco	SXL
Enterprise Products	EPD
Kinder Morgan Egy Ptnrs L.P.	KMP

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Liquid Pipelines
2012 Assessment Year

Company	Ticker Symbol	(YAHOO) E/P	(VL) EPS	(VL) E/P	(VL) CF/S	(VL) CF/P	(YAHOO) P/E	(YAHOO) Inverse of P/E 1/S	(VL) P/E	(VL) Inverse of P/E 1/U	(VL) Median P/E	(VL) Inverse of Med P/E 1/U	(VL) Beta	
		M/E	O/E	Q/E										
Enbridge Energy Partners LP	EEP	3.38%	1.61	5.39%	2.60	8.71%	31.40	3.19%			25.00	4.00%	0.90	
Magellan Midstream Partners LP	MMP	5.43%	3.50	5.48%	4.55	7.12%	19.17	5.22%	19.82	5.05%	15.00	6.67%	0.85	
Nustar Energy LP	NS	5.69%	2.90	5.26%				17.69	5.65%			17.00	5.88%	0.85
Sunoco Logistics Partners L.P.	SXL	2.74%	2.56	2.90%				29.00	3.45%					0.85
Buckeye	BPL	1.13%	2.85	4.45%	3.90	6.09%	88.02	1.14%	19.99	5.00%	15.00	6.67%	0.80	
Enterprise Products	EPD	4.40%	2.10	4.76%	3.35	7.60%	23.51	4.25%	21.40	4.67%	24.00	4.17%	0.85	
Kinder Morgan Egy Ptnrs L.P.	KMP	0.18%	1.65	2.16%	4.55	5.95%	580.82	0.17%	43.99	2.27%	23.00	4.35%	0.75	
Plains All American PL LP	PAA	6.49%	4.90	7.55%	7.95	12.25%	16.44	6.08%	15.58	6.42%	17.00	5.88%	0.85	

SUMS & AVGS - ALL COMPANIES	3.68%	4.74%	7.95%	3.64%	4.68%	5.37%	0.84
SUMS & AVGS - B++ COMPANIES	4.31%	4.76%	7.92%	4.38%	5.05%	5.52%	0.86
SUMS & AVGS - B COMPANIES	3.05%	4.73%	7.97%	2.91%	4.59%	5.27%	0.81
MEDIAN - ALL COMPANIES	3.89%	5.01%	7.36%	3.85%	5.00%	5.88%	0.85

* All Negative values left out of calculations

Industry Beta Conclusion = **0.85**

Notes/Rational for Changes to Guideline Companies
2012

The Guideline Companies were reviewed and some vertically integrated companies.

The additions include:

Sunoco	SXL
Enterprise Products	EPD
Kinder Morgan Egy Ptnrs L.P.	KMP

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model
Industry: Liquid Pipelines
2011 Assessment Year

$$K_E = R_F + \beta (R_M - R_F)$$

Liquids

K_E = Cost of Equity	8.08%
R_F = Risk Free Rate	2.89%
β = Beta	0.85
R_M = Market Rate of Return	9.00%
R_P = Equity Risk Premium ($R_M - R_F$)	6.11%

R_m = Investor's Market Rate of Return

Ibbotson, SBBI, Large Company, Average Annual Return, *Arithmetic Average, Ex-Post
Ibbotson, SBBI, Large Company, Average Annual Return, *Geometric Average, Ex-Post
3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante

R_M =	11.80%
R_M =	9.80%
R_M =	8.50%
Mean =	10.03%
Median =	9.80%
R_M =	9.00%

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2011-31 Table 2 December 2011

Rev Rule 2011-31 Table 2

<u>Annual Rates</u>	<u>Short Term - AFR</u>	R_f =	0.45%
	<u>Mid Term - AFR</u>	R_f =	1.69%
	<u>Long Term - AFR</u>	R_f =	3.55%

The ValueLine Investment Survey

U.S. Treasury Securities January 6, 2012

<u>3 Month</u>	R_f =	0.01%
<u>6 Month</u>	R_f =	0.05%
<u>1 Year</u>	R_f =	0.10%

Federal Reserve Statistical Release

Treasury constant Maturities, 2011

Market yield on U.S. Treasury securities, Annual Averages

<u>3-month constant maturity, quoted on investment basis</u>	R_f =	0.02%
<u>6-month constant maturity, quoted on investment basis</u>	R_f =	0.06%
<u>1-year constant maturity, quoted on investment basis</u>	R_f =	0.12%

U.S. Treasury Securities Long-Term December 30, 2011

<u>20 year constant maturity</u>	R_f =	2.57%
<u>30 year constant maturity</u>	R_f =	2.89%
	Mean =	0.67%
	Median =	0.10%
	Weighted Mean =	0.86%
	R_f =	2.89%

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model

Industry: Liquid Pipelines

2012 Assessment Year

$$K_E = D_1 / P_0 + G_A$$

KE= Cost of Equity

Po= Current Price Per Share

D1= Expected Dividends

G= Sustainable Growth

Company Name	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/P0)	Dividend Growth (G ₁)	Ke 1 Year
Buckeye	BPL	63.99	4.20	6.56%	4.00%	10.56%
Enbridge Energy Partners LP	EEP	29.86	1.03	3.45%	6.50%	9.95%
Enterprise Products	EPD	44.09	2.53	5.74%	8.00%	13.74%
Kinder Morgan Egy Ptnrs L.P.	KMP	76.45	4.98	6.51%	6.00%	12.51%
Magellan Midstream Partners LP	MMP	63.88	3.35	5.24%	5.00%	10.24%
Nustar Energy LP	NS	55.15				
Plains All American PL LP	PAA	64.89	4.15	6.40%	4.00%	10.40%
Sunoco Logistics Partners L.P.	SXL	88.40				

Weighted Mean 11.13%

Mean 11.23%

Median 10.48%

Cost of Equity, (K_E) = **11.25%**

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Liquid Pipelines
2012 Assessment Year

Ticker	Company														Yahoo			
			Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P-E EPS 1st 12 mo	
BPL	Buckeye	high low	\$68.81 \$64.00	\$65.60 \$62.70	\$65.54 \$58.45	\$65.20 \$59.89	\$65.05 \$59.85	\$64.76 \$60.29	\$65.24 \$61.83	\$64.00 \$54.51	\$64.99 \$61.06	\$68.45 \$59.00	\$67.64 \$62.11	\$65.05 \$61.70	\$63.99	\$63.16	88.02	0.72
COP	ConocoPhillips Inc	high low	\$71.74 \$66.50	\$79.60 \$69.75	\$81.80 \$71.13	\$81.75 \$76.36	\$78.98 \$70.61	\$75.27 \$70.08	\$80.13 \$71.45	\$73.46 \$60.40	\$68.87 \$61.79	\$73.70 \$58.65	\$72.97 \$66.13	\$73.90 \$87.65	\$68.83	\$71.78	9.07	7.80
CVX	ChevronTexaco Corp	high low	\$95.19 \$90.12	\$103.94 \$95.17	\$109.65 \$97.60	\$109.94 \$103.04	\$109.58 \$99.61	\$104.95 \$97.00	\$109.75 \$102.01	\$106.13 \$87.30	\$100.58 \$88.56	\$110.01 \$86.68	\$109.00 \$92.29	\$108.49 \$99.32	\$100.97	\$100.66	7.70	13.50
EEP	Enbridge Energy Partners LP	high low	\$63.99 \$60.50	\$67.09 \$61.57	\$67.71 \$60.64	\$66.85 \$33.01	\$34.06 \$29.12	\$30.91 \$28.50	\$30.24 \$28.61	\$30.10 \$25.03	\$29.60 \$26.81	\$30.66 \$24.86	\$31.40 \$29.00	\$33.22 \$30.20	\$29.86	\$39.73	31.40	1.01
EPD	Enterprise Products	high low	\$43.84 \$41.41	\$44.35 \$42.32	\$43.99 \$36.00	\$43.95 \$41.94	\$43.26 \$38.67	\$43.33 \$40.00	\$43.95 \$40.75	\$43.45 \$36.36	\$43.24 \$39.77	\$45.54 \$38.01	\$46.11 \$43.67	\$46.70 \$44.52	\$44.09	\$42.30	23.51	1.94
HEP	Holly Energy Part. LP	high low	\$54.69 \$50.12	\$60.08 \$52.49	\$61.05 \$53.30	\$58.91 \$52.16	\$56.82 \$51.74	\$55.87 \$48.55	\$55.02 \$51.74	\$54.91 \$45.40	\$51.77 \$47.00	\$59.96 \$47.30	\$57.43 \$53.81	\$53.95 \$51.36	\$53.97	\$53.56	21.32	2.47
KMP	Kinder Morgan Egy Ptnrs L.P.	high low	\$73.08 \$69.66	\$73.87 \$70.96	\$74.51 \$70.24	\$78.00 \$72.96	\$77.61 \$70.41	\$74.95 \$69.50	\$74.00 \$69.54	\$72.03 \$63.42	\$72.06 \$67.08	\$78.00 \$65.00	\$79.34 \$73.71	\$84.95 \$77.68	\$76.45	\$73.02	580.82	0.14
MMP	Magellan Midstream Partners LP	high low	\$57.40 \$53.33	\$60.44 \$55.82	\$60.57 \$56.11	\$63.10 \$58.52	\$61.95 \$55.55	\$60.48 \$56.52	\$60.56 \$57.34	\$60.67 \$51.00	\$61.85 \$58.00	\$65.92 \$57.38	\$65.20 \$61.75	\$69.21 \$63.81	\$63.88	\$59.69	19.17	3.47
NS	Nustar Energy LP	high low	\$70.32 \$67.25	\$70.44 \$68.18	\$70.87 \$64.26	\$68.80 \$65.67	\$68.40 \$59.47	\$65.48 \$61.44	\$66.39 \$62.25	\$64.25 \$51.34	\$59.61 \$52.21	\$57.75 \$49.02	\$58.96 \$54.05	\$57.94 \$53.15	\$55.15	\$61.90	17.69	3.14
PAA	Plains All American PL LP	high low	\$65.44 \$62.31	\$65.83 \$63.11	\$65.96 \$60.21	\$65.69 \$62.53	\$64.39 \$57.80	\$64.28 \$59.62	\$64.98 \$61.01	\$64.30 \$56.41	\$61.10 \$57.98	\$66.23 \$54.90	\$66.80 \$63.00	\$73.55 \$64.86	\$64.89	\$63.01	16.44	4.21
SUN	Sunoco Inc	high low	\$43.76 \$38.42	\$44.44 \$41.01	\$46.62 \$40.85	\$46.98 \$41.13	\$42.92 \$38.67	\$41.81 \$38.56	\$43.43 \$40.13	\$41.36 \$27.76	\$39.59 \$30.89	\$39.55 \$28.79	\$39.66 \$34.80	\$41.24 \$37.00	\$36.84	\$39.56	(3.77)	(10.38)
SXL	Sunoco Logistics Partners L.P.	high low	\$87.45 \$83.00	\$89.49 \$84.50	\$89.92 \$81.29	\$91.03 \$85.75	\$90.53 \$77.99	\$86.36 \$80.59	\$87.08 \$83.22	\$87.86 \$73.19	\$90.94 \$82.18	\$100.00 \$85.51	\$107.51 \$97.03	\$106.91 \$93.43	\$88.40	\$85.95	29.00	2.42
TOT	Total SA	high low	\$59.84 \$52.61	\$61.44 \$58.05	\$62.31 \$54.39	\$64.44 \$57.19	\$64.28 \$54.92	\$57.90 \$53.04	\$58.25 \$53.35	\$54.40 \$43.81	\$49.79 \$40.00	\$55.93 \$40.00	\$52.89 \$41.85	\$52.46 \$46.72	\$49.48	\$54.04	7.33	6.78
TSO	Tesoro Corp.	high low	\$19.74 \$17.60	\$25.93 \$19.03	\$27.99 \$22.37	\$28.74 \$24.66	\$27.50 \$22.74	\$24.68 \$20.38	\$25.79 \$22.28	\$24.97 \$17.82	\$25.25 \$18.34	\$27.25 \$17.43	\$29.61 \$22.35	\$25.23 \$21.04	\$23.82	\$23.28	4.93	4.69
VLO	Valero Energy Corp.	high low	\$25.79 \$23.01	\$30.42 \$25.53	\$30.96 \$25.60	\$31.12 \$26.65	\$28.70 \$25.21	\$27.65 \$22.96	\$27.10 \$24.11	\$25.55 \$17.87	\$23.85 \$17.77	\$26.86 \$16.40	\$26.44 \$20.17	\$23.22 \$19.82	\$22.15	\$24.70	7.66	2.81
WMB	Williams Cos	high low	\$27.17 \$24.26	\$30.95 \$26.73	\$31.77 \$28.70	\$33.33 \$29.86	\$33.47 \$29.39	\$31.57 \$27.92	\$33.16 \$28.34	\$32.11 \$23.46	\$28.26 \$24.27	\$31.40 \$21.90	\$32.50 \$29.02	\$33.11 \$30.36	\$29.72	\$29.29	19.00	1.67
XOM	Exxon Mobil	high low	\$80.82 \$73.64	\$88.23 \$81.04	\$86.50 \$78.80	\$88.00 \$82.38	\$88.13 \$79.42	\$83.65 \$76.72	\$85.41 \$79.76	\$81.18 \$67.03	\$74.98 \$67.93	\$82.20 \$69.21	\$80.53 \$73.90	\$85.63 \$78.66	\$78.36	\$79.74	9.92	8.28

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
XTO Energy Inc.	7.5	98385XAA4	Sr Nts	04/15/2012	AAA						7.12	7.16	7.20	7.24	7.28	7.31	7.35	7.24%	7.31%	
XTO Energy Inc.	6.25	98385XAC0	Sr Nts	04/15/2013	AAA						5.71	5.72	5.74	5.77	5.79	5.82	5.84	5.77%	5.82%	
XTO Energy Inc.	4.9	98385XAD8	Sr Nts	02/01/2014	AAA						4.47	4.46	4.46	4.48	4.49	4.50	4.51	4.48%	4.50%	
XTO Energy Inc.	5.3	98385XAG1	Sr Nts	06/30/2015	AAA						4.65	4.60	4.57	4.60	4.63	4.63	4.62	4.61%	4.63%	
XTO Energy Inc.	5.65	98385XAH9	Sr Nts	04/01/2016	AAA						4.87	4.80	4.76	4.77	4.80	4.76	4.75	4.79%	4.77%	
XTO Energy Inc.	6.1	98385XAJ5	Sr Nts	04/01/2036	AAA						5.26	5.08	4.78	4.44	4.56	4.47	4.35	4.71%	4.46%	
XTO Energy Inc.	5.9	98385XAK2	Sr Nts	08/01/2012	AAA						5.59	5.61	5.64	5.66	5.68	5.71	5.73	5.66%	5.71%	
XTO Energy Inc.	6.25	98385XAL0	Sr Nts	08/01/2017	AAA						5.16	5.07	5.07	5.08	5.11	5.11	5.09	5.10%	5.10%	
XTO Energy Inc.	6.75	98385XAM8	Sr Nts	08/01/2037	AAA						5.22	5.07	4.77	4.31	4.43	4.52	4.37	4.67%	4.44%	
XTO Energy Inc.	4.62	98385XAN6	Sr Nts	06/15/2013	AAA						4.31	4.31	4.32	4.34	4.35	4.37	4.37	4.34%	4.36%	
XTO Energy Inc.	5.5	98385XAP1	Sr Nts	06/15/2018	AAA						4.78	4.68	4.52	4.50	4.54	4.53	4.48	4.58%	4.52%	
XTO Energy Inc.	6.38	98385XAQ9	Sr Nts	06/15/2038	AAA						5.28	4.99	4.61	4.28	4.58	4.46	4.34	4.65%	4.46%	
Texaco Capital	9.75	881685AN1	GtdDeb	03/15/2020	AA	7.42	7.35	7.37	7.36	7.05	7.12	6.74	6.64	6.68	6.74	6.79	6.72	7.00%	6.75%	
Texaco Capital	8.875	881685AV3	GtdDeb	09/01/2021	AA	6.80	6.72	6.75	6.73	6.58	6.64	6.18	6.06	6.10	6.16	6.22	6.14	6.42%	6.17%	
Texaco Capital	8.625	881685AX9	GtdDeb	11/15/2031	AA	6.67	6.47	6.49	6.47	6.28	6.40	5.89	5.73	5.53	5.47	5.34	5.23	6.00%	5.35%	
Texaco Capital	8.625	881685AY7	GtdDeb	04/01/2032	AA	6.67	6.46	6.48	6.46	6.27	6.39	5.87	5.71	5.51	5.28	5.32	5.21	5.97%	5.27%	
Texaco Capital	8	881685BB6	GtdDeb	08/01/2032	AA	6.54	6.33	6.35	6.33	6.14	6.25	5.74	5.59	5.38	5.47	6.96	5.39	6.04%	5.94%	
Texaco Capital	7.5	881685BD2	GtdDeb	03/01/2043	AA	6.91	6.84	6.88	6.85	6.81	6.84	6.81	6.85	6.91	6.92	6.96	6.97	6.88%	6.95%	
Atlantic Richfield	9	048825AW3	Deb	04/01/2021	A	7.28	7.30	7.32	7.06	7.06	6.97	6.97	6.79	6.67	6.81	6.77	6.90	6.99%	6.83%	
Atlantic Richfield	9	048825AY9	Deb	05/01/2031	A	7.41	7.35	7.36	7.16	6.96	6.92	6.92	6.92	6.56	6.73	6.63	6.51	6.95%	6.62%	
Atlantic Richfield	9.125	048825AZ6	Deb	08/01/2031	A	7.39	7.33	7.35	7.14	6.94	6.90	6.90	6.89	6.53	6.70	6.61	6.48	6.93%	6.60%	
Atlantic Richfield	8.25	048825BA0	Deb	02/01/2022	A	6.70	6.72	6.74	6.60	6.45	6.36	6.36	6.18	6.06	6.20	6.16	6.07	6.38%	6.14%	
Atlantic Richfield	8.75	048825BB8	Deb	03/01/2032	A	7.34	7.09	7.11	6.90	6.71	6.67	6.67	6.52	6.16	6.33	6.24	6.11	6.65%	6.23%	
Atlantic Richfield	8.5	048825BC6	Deb	04/01/2012	A	7.95	7.99	8.03	8.02	7.99	8.03	8.03	8.15	8.19	8.25	8.31	8.36	8.11%	8.31%	
Burlington Resources Inc.	9.125	122014AE3	Deb	10/01/2021	A	6.63	6.68	6.70	6.69	6.56	6.52	6.52	6.21	6.13	6.21	6.25	6.27	6.45%	6.24%	
Burlington Resources Inc.	8.2	122014AH6	Deb	03/15/2025	A	6.54	6.59	6.63	6.61	6.44	6.37	6.37	6.12	6.02	6.01	6.31	6.20	6.35%	6.17%	
Burlington Resources Inc.	6.875	122014AJ2	Deb	02/15/2026	A	6.06	6.21	6.25	6.23	6.06	5.85	5.85	5.60	5.49	5.71	5.77	5.66	5.90%	5.71%	
Burlington Resources Inc.	7.375	122014AL7	Deb	03/01/2029	A	6.27	6.25	6.29	6.27	6.12	6.13	6.13	5.86	5.46	5.63	5.67	5.56	5.97%	5.62%	
Burlington Resources Fin	7.2	12201PAB2	Gtd Nt	8/15/2031	A	5.98	5.93	5.95	5.90	5.78	5.79	5.79	5.52	5.24	5.31	5.38	5.36	5.66%	5.35%	
Conoco Inc	6.95	208251AE8	Nts	04/15/2029	A	5.72	5.76	5.82	5.80	5.65	5.61	5.61	5.43	5.15	5.10	5.25	5.09	5.50%	5.15%	
ConocoPhillips	4.75	20825CAE4	Nts	10/15/2012	A	4.44	4.46	4.48	4.48	4.50	4.50	4.50	4.54	4.56	4.57	4.59	4.61	4.52%	4.59%	
ConocoPhillips	5.9	20825CAF1	Nts	10/15/2032	A	5.49	5.43	5.48	5.49	5.32	5.33	5.33	5.02	4.80	4.91	4.84	4.78	5.19%	4.84%	
Conoco Funding	7.25	20825UAC8	Nt	10/15/2031	A	5.88	5.90	5.92	5.75	5.76	5.76	5.76	5.51	5.23	5.20	5.33	5.34	5.63%	5.29%	
Louisiana Land/Exp	7.625	546268AF0	Deb	04/15/2013	A	6.80	6.85	6.88	6.89	6.91	6.86	6.88	6.93	6.99	6.96	7.01	7.04	6.92%	7.00%	
Louisiana Land/Exp	7.65	546268AG8	Deb	12/01/2023	A	6.03	6.08	6.48	6.46	6.06	6.15	5.96	5.78	5.75	5.71	5.74	5.65	5.99%	5.70%	
Occidental Petroleum Corp.	9.25	674599BE4	Sr Deb	08/01/2019	A	6.88	6.89	6.89	6.89	6.76	6.83	6.69	6.52	6.46	6.85	6.72	6.71	6.76%	6.76%	
Occidental Petroleum Corp.	7.2	674599BM6	Sr Deb	04/01/2022	A	6.35	6.28	6.28	6.26	6.26	6.26	6.26	6.13	5.73	5.85	5.84	5.66	5.98%	5.57%	
Occidental Petroleum Corp.	7.2	674599BM6	Sr Deb	4/1/2028	A	6.35	6.28	6.28	6.26	6.10	6.29	6.13	5.86	5.55	5.74	5.50	5.48	5.99%	5.57%	
Occidental Petroleum Corp.	8.45	674599BT1	Sr Nts	02/15/2029	A	6.78	6.73	6.73	6.70	6.55	6.65	6.49	6.20	5.88	6.08	5.83	5.81	6.37%	5.91%	
Occidental Pete Corp Med Term	8.75	67461FED5	MTN Tranche # Tr	1/15/2023	A	7.14	7.16	7.19	7.17	6.99	7.06	6.69	6.63	6.54	6.62	6.58	6.49	6.86%	6.56%	
Occidental Petro	8.75	67461FED5	Sr Nts	01/15/2023	A	7.14	7.16	7.19	7.17	6.99	7.06	6.69	6.63	6.54	6.62	6.58	6.49	6.88%	6.56%	
Phillips Petroleum	6.65	718507BH8	Deb	07/15/2018	A	5.57	5.59	5.66	5.64	5.50	5.55	5.45	5.41	5.40	5.40	5.42	5.33	5.49%	5.38%	
Phillips Petroleum	7	718507BK1	Deb	03/30/2029	A	5.88	5.86	5.89	5.88	5.73	5.85	5.73	5.53	5.26	5.19	5.45	5.34	5.63%	5.33%	
ANR Pipeline	7.38	001814AQ5	Deb	2/15/2024	A-	6.21	6.23	6.14	6.04	5.91	5.98	5.98	5.66	5.73	5.85	5.84	5.66	5.94%	5.78%	
ANR Pipeline	9.62	001814AR3	Deb	11/12/2021	A-	6.87	6.96	6.93	6.92	6.77	6.66	6.62	6.55	6.44	6.42	6.54	6.70%	6.47%		
ANR Pipeline	7	001814AS1	Deb	6/1/2025	A-	6.86	6.81	6.83	6.81	6.09	5.98	5.98	5.68	5.53	5.65	5.68	5.53	6.12%	5.62%	
Apache Corp.	7.7	037411AJ4	Nts	03/15/2026	A-	5.97	5.95	5.96	5.93	5.87	5.84	5.84	5.53	5.48	5.49	5.44	5.66	5.75%	5.53%	
Apache Corp.	7.95	037411AK1	Nts	04/15/2026	A-	6.16	6.13	6.11	6.04	5.93	5.90	5.90	5.59	5.54	5.56	5.50	5.73	5.84%	5.60%	
Apache Corp.	7.38	037411AM7	Deb	08/15/2047	A-	6.21	6.16	6.20	6.10	5.89	5.88	5.88	5.29	4.92	4.82	4.74	4.82%	4.79%		
Apache Corp.	7	037411AN5	Sr Nts	02/01/2018	A-	5.84	5.90	5.91	5.89	5.76	5.74	5.74	5.62	5.60	5.64	5.62	5.60	5.74%	5.62%	
Apache Corp.	7.62	037411AP0	Sr Nts	07/01/2019	A-	6.35	6.40	6.26	6.25	6.14	6.13	6.13	5.94	5.87	5.98	5.95	5.91	6.11%	5.95%	
Apache Corp.	6.25	037411AQ8	Nts	04/15/2012	A-	5.87	5.90	5.93	5.93	5.95	5.98	5.98	5.64	5.04	6.07	6.10	6.12	6.15	6.00%	6.12%
Apache Corp.	6	037411AR6	Nts	01/15/2037	A-	5.75	5.67	5.66	5.60	5.40	5.39	5.39	5.06	4.81	4.71	4.74	4.65	5.24%	4.70%	
Apache Corp.	5.62	037411AS4	Nts	01/15/2017	A-	4.95	5.01	5.00	4.96	4.86	4.80	4.80	4.74	4.74	4.70	4.73	4.74	4.84%	4.72%	
Apache Corp.	5.25	037411AT2	Nts	04/15/2013	A-	4.83	4.85	4.87	4.86	4.85	4.86	4.86	4.88	4.92	4.92	4.94	4.96	4.88%	4.94%	
Diamond Offshore Drilling, Inc.	5.15	25271CAG7	Sr Nts	09/01/2014	A-	4.71	4.72	4.74	4.73	4.67	4.68	4.66	4.69	4.75	4.76	4.78	4.74	4.72%	4.76%	
Diamond Offshore Drilling, Inc.	4.88	25271CAJ1	Sr Nts	07/01/2015	A-	4.51	4.51	4.52	4.52	4.46	4.48	4.42	4.43	4.48	4.50	4.50	4.49	4.49%	4.50%	
EOG Resources, Inc.	5.88	26875PA9	Sr Nts	09/15/2017	A-	5.17	5.23	5.24	5.23	5.13	5.13	5.00	4.96	4.98	4.93	4.92	4.92	5.07%	4.92%	
Enron Oil & Gas	6.65	293562AD6	Nts	04/01/2028	A-	6.20	6.15	6.13	6.11	5.95										

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Enbridge Energy Partners, L.P.	4.75	29250RAC0	Sr Nts 'B'	06/01/2013	BBB	4.48	4.50	4.48	4.48	4.46	4.47	4.53	4.53	4.32	4.56	4.52	4.61	4.50%	4.56%
Enbridge Energy Partners, L.P.	5.95	29250RAD8	Sr Nts 'B'	06/01/2033	BBB	6.30	6.02	6.03	6.01	5.81	5.93	5.68	5.58	5.36	5.53	5.26	5.20	5.73%	5.33%
Enbridge Energy Partners, L.P.	5.88	29250RAH9	Nt	12/15/2016	BBB	5.26	5.25	5.30	5.24	5.15	5.15	5.03	4.99	5.14	5.11	5.09	5.13	5.15%	5.11%
Energen Corp.	5	29265NAQ1	Nts	10/01/2013	BBB	4.79	4.82	4.84	4.84	4.81	4.81	4.81	4.80	4.84	4.83	4.84	4.84	4.82%	4.84%
Kinder Morgan Energy Partners, L.P.	7.4	494550AJ5	Nts	03/15/2031	BBB	6.63	6.61	6.59	6.50	6.34	6.50	6.31	6.33	6.16	6.21	6.22	6.19	6.38%	6.21%
Kinder Morgan Energy Partners, L.P.	7.125	494550AK2	Nts	03/15/2012	BBB	6.69	6.73	6.73	6.74	6.79	6.83	6.86	6.91	6.95	6.98	7.01	7.04	6.86%	7.01%
Kinder Morgan Energy Partners, L.P.	7.75	494550AL0	Nts	03/15/2032	BBB	6.70	6.65	6.66	6.53	6.37	6.53	6.33	6.38	6.00	6.31	6.28	6.25	6.42%	6.28%
Kinder Morgan Energy Partners, L.P.	7.3	494550AQ9	Sr Nts	08/15/2033	BBB	6.52	6.58	6.53	6.42	6.25	6.41	6.20	6.29	6.20	6.25	6.26	6.25	6.35%	6.25%
Kinder Morgan Energy Partners, L.P.	5	494550AR7	Sr Nts	12/15/2013	BBB	4.56	4.60	4.62	4.61	4.59	4.61	4.62	4.64	4.67	4.68	4.69	4.71	4.63%	4.69%
Kinder Morgan Energy Partners, L.P.	6	494550AU0	Sr Nt	2/1/2017	BBB	5.39	5.42	5.38	5.36	5.25	5.32	5.21	5.22	5.30	5.28	5.32	5.30	5.31%	5.30%
Kinder Morgan Energy Partners, L.P.	6.5	494550AV8	Sr Nt	2/1/2037	BBB	6.35	6.35	6.31	6.22	6.00	6.24	5.92	6.08	6.07	5.99	6.01	5.90	6.12%	5.97%
Kinder Morgan Energy Partners, L.P.	6.95	494550AW6	Sr Nt	1/15/2038	BBB	6.45	6.47	6.47	6.29	6.12	6.40	6.04	6.25	6.23	6.06	6.06	6.15	6.25%	6.09%
Lakehead Pipe Line Co	7	511546AA1	Sr Nt	10/12/2018	BBB	6.09	6.14	6.16	6.13	6.02	6.07	5.92	5.84	5.79	5.85	5.82	5.84	5.97%	5.84%
Lakehead Pipe Line Co	7.12	511546AB9	Sr Nt	10/1/2028	BBB	6.70	6.65	6.66	6.64	6.14	6.25	6.10	5.94	5.61	5.69	5.62	5.55	6.13%	5.62%
Lakehead Pipe Line Co	7.9	511546AE3	Nt	11/21/2012	BBB	7.16	7.20	7.24	7.25	7.28	7.31	7.33	7.37	7.41	7.44	7.47	7.51	7.33%	7.47%
Marathon Oil Corp.	6.8	656849AB2	Nts	03/15/2032	BBB	6.01	5.96	6.06	6.05	5.88	6.07	5.87	5.57	5.72	5.58	5.37	5.80	5.63%	5.58%
Murphy Oil Corp.	7.05	626717AA0	Nts	05/01/2029	BBB	6.37	6.41	6.27	6.25	6.06	6.16	6.00	6.02	5.70	5.96	5.70	5.77	6.06%	5.81%
Murphy Oil Corp.	6.38	626717AB8	Nts	05/01/2012	BBB	6.03	6.03	6.05	6.08	6.10	6.12	6.15	6.18	6.20	6.22	6.25	6.27	6.14%	6.25%
ONEOK Partners, L.P.	5.9	68268NAA1	Gtd Sr Nt	4/1/2012	BBB	5.60	5.62	5.63	5.64	5.66	5.69	5.70	5.74	5.77	5.78	5.81	5.83	5.71%	5.81%
ONEOK Partners, L.P.	6.15	68268NAB9	Gtd Sr Nt	10/1/2016	BBB	5.36	5.43	5.44	5.44	5.33	5.34	5.25	5.33	5.41	5.34	5.35	5.35	5.36%	5.35%
ONEOK Partners, L.P.	6.65	68268NAC7	Gtd Sr Nt	10/1/2036	BBB	6.29	6.21	6.26	6.16	5.95	6.13	5.83	5.92	5.72	5.66	5.53	5.62	5.94%	5.60%
USX Corp.	9.375	902905AK4	Deb	02/15/2012	BBB	8.66	8.72	8.76	8.80	8.87	8.93	8.99	9.05	9.11	9.17	9.23	9.29	8.97%	9.23%
USX Corp.	9.375	902905AL2	Deb	05/15/2022	BBB	7.05	7.45	7.47	7.46	7.28	7.36	8.33	6.94	6.88	6.97	6.93	6.83	7.25%	6.91%
USX Corp.	9.125	902905AM0	Deb	01/15/2013	BBB	8.15	8.19	8.23	8.24	8.26	8.31	8.33	8.37	8.42	8.46	8.51	8.54	8.33%	8.50%
USX Corp.	8.5	902905AN8	Deb	03/01/2023	BBB	6.80	6.82	6.84	6.82	6.65	6.73	6.55	6.31	6.25	6.33	6.29	6.20	6.55%	6.27%
USX Corp.	8.125	902905AQ1	Deb	07/15/2023	BBB	6.65	6.67	6.69	6.67	6.50	6.57	6.39	6.15	6.09	6.17	6.13	6.03	6.39%	6.11%
Valero Energy	6.7	919138AD9	Sr Nts	01/15/2013	BBB	6.23	6.26	6.27	6.28	6.19	6.22	6.23	6.25	6.28	6.30	6.33	6.34	6.27%	6.32%
Valero Energy Corp. (New)	8.75	91913YAB6	Nts	06/15/2030	BBB	7.79	7.49	7.50	7.25	6.97	7.11	6.93	7.03	6.80	6.88	6.74	6.72	7.10%	6.78%
Valero Energy Corp. (New)	6.875	91913YAD2	Nts	04/15/2012	BBB	6.43	6.48	6.49	6.52	6.55	6.57	6.60	6.64	6.67	6.70	6.72	6.76	6.59%	6.73%
Valero Energy Corp. (New)	7.5	91913YAE0	Nts	04/15/2032	BBB	6.73	6.73	6.80	6.65	6.45	6.72	6.36	6.68	6.49	6.25	6.33	6.40	6.55%	6.33%
Valero Energy Corp. (New)	4.75	91913YAG5	Nts	06/15/2013	BBB	4.45	4.45	4.47	4.47	4.46	4.47	4.47	4.48	4.51	4.51	4.52	4.53	4.48%	4.52%
Valero Energy Corp. (New)	4.75	91913YAK6	Sr Nts	04/01/2014	BBB	4.49	4.52	4.48	4.47	4.44	4.45	4.43	4.43	4.45	4.45	4.46	4.46	4.46%	4.45%
Valero Energy Corp. (New)	6.62	91913YAL4	Nts	06/15/2037	BBB	6.45	6.48	6.58	6.43	6.20	6.35	6.11	6.17	6.17	6.04	6.20	6.17	6.28%	6.14%
Valero Energy Corp. (New)	6.12	91913YAM2	Nts	06/15/2017	BBB	5.54	5.52	5.52	5.51	5.37	5.41	5.29	5.41	5.50	5.45	5.44	5.48	5.45%	5.46%
Anadarko Petroleum Corp.	7.25	032511AH0	Deb	03/15/2025	BBB	6.61	6.47	6.54	6.42	6.18	6.15	6.15	6.07	6.10	5.98	6.09	5.90	6.22%	5.99%
Anadarko Petroleum Corp.	7	032511AL1	Deb	11/15/2027	BBB	7.06	6.81	6.89	6.71	6.47	6.51	6.51	6.45	6.43	6.14	6.21	6.03	6.52%	6.13%
Anadarko Petroleum Corp.	6.62	032511AM9	Deb	01/15/2028	BBB	6.87	6.62	6.69	6.51	6.27	6.30	6.30	6.28	6.26	5.97	6.04	5.99	6.34%	6.00%
Anadarko Petroleum Corp.	7.2	032511AN7	Deb	03/15/2029	BBB	7.22	6.93	7.01	6.83	6.55	6.60	6.60	6.48	6.46	6.15	6.23	6.04	6.59%	6.14%
Anadarko Petroleum Corp.	6.12	032511AT4	Nts	03/15/2012	BBB	5.83	5.85	5.87	5.88	5.89	5.92	5.92	5.98	6.01	6.02	6.05	6.07	5.94%	6.05%
Anadarko Petroleum Corp.	5	032511AU1	Nts	10/01/2012	BBB	4.77	4.78	4.80	4.79	4.79	4.81	4.81	4.85	4.89	4.84	4.88	4.88	4.83%	4.87%
Anadarko Petroleum Corp.	5.95	032511AX5	Sr Nts	09/15/2016	BBB	5.42	5.42	5.45	5.37	5.25	5.23	5.23	5.32	5.48	5.18	5.37	5.24	5.33%	5.26%
Anadarko Petroleum Corp.	6.45	032511AY3	Sr Nts	09/15/2036	BBB	6.61	6.40	6.47	6.34	6.08	6.09	6.09	6.34	6.15	5.63	5.81	5.65	6.14%	5.70%
Boardwalk Pipelines Llc	5.5	096629AA8	Nt	2/1/2017	BBB	5.16	5.19	5.15	5.13	5.01	4.91	4.91	4.97	5.01	5.08	5.11	5.04	5.06%	5.08%
Boardwalk Pipelines Lp	5.88	096630AA6	Sr Nt	11/15/2016	BBB	5.31	5.35	5.37	5.35	5.19	5.17	5.17	5.21	5.21	5.29	5.32	5.22	5.26%	5.28%
Energy Transfer Partners, L.P.	5.95	29273RAB5	Sr Nt	2/1/2015	BBB	5.38	5.40	5.42	5.40	5.32	5.37	5.32	5.37	5.55	5.50	5.51	5.42%	5.50%	
Energy Transfer Partners, L.P.	5.65	29273RAD1	Sr Nt	8/1/2012	BBB	5.34	5.36	5.39	5.38	5.40	5.39	5.39	5.41	5.44	5.48	5.48	5.51	5.43%	5.51%
Energy Transfer Partners, L.P.	6.12	29273RAE9	Sr Nt	2/15/2017	BBB	5.53	5.51	5.44	5.49	5.40	5.50	5.44	5.49	5.63	5.56	5.60	5.57	5.51%	5.58%
Energy Transfer Partners, L.P.	6.62	29273RAF6	Sr Nt	10/15/2036	BBB	6.24	6.25	6.34	6.23	6.11	6.42	6.21	6.38	6.45	6.22	6.16	6.30	6.28%	6.23%
Enterprise Products Oper	6.375	293791AD1	Sr Nts 'B'	02/01/2013	BBB	5.82	5.86	5.89	5.89	5.91	5.94	5.95	5.98	6.02	6.03	6.07	6.08	6.05%	6.06%
Enterprise Products Oper	5.6	293791AN9	Sr Nts 'B'	10/15/2014	BBB	5.02	5.05	5.06	5.04	5.02	5.04	5.02	5.10	5.12	5.08	5.10	5.11	5.06%	5.10%
Enterprise Products Oper	6.65	293791AP4	Sr Nts 'B'	10/15/2034	BBB	6.22	6.20	6.24	6.17	5.99	6.13	5.88	5.93	5.77	5.48	5.81	5.63	5.95%	5.64%
Enterprise Products Oper	5	293791AR0	Sr Nts 'B'	03/01/2015	BBB	4.61	4.66	4.66	4.65	4.57	4.59	4.52	4.52	4.60	4.59	4.59	4.59	4.60%	4.59%
Enterprise Products Oper	5.75	293791AT6	Sr Nts 'B'	03/01/2035	BBB	5.96	6.00	6.01	5.94	5.77	5.92	5.66	5.72	5.53	5.30	5.60	5.40	5.73%	5.43%
Kerr-McGee Corp.	7.125	492386AK3	Deb	10/15/2027	BBB	6.81	6.48	6.54	6.41	6.29	6.43	6.20	6.19	6.05	6.17	5.99	6.31%	6.07%	
Kerr-McGee Corp.	7.875	492386AT4	Nts	09/15/2031	BBB	7.00	6.77	6.90	6.73	6.40	6.40	6.34	6.52	6.40	6.04	6.40	6.28	6.52%	6.24%
Kerr-McGee Corp.	6.95	492386AU1	Nts	07/01/2024	BBB	6.37	6.19	6.27	6.23	6.02	6.10	5.85	5.91	5.95	5.75	5.87	5.82	6.03%	

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Anadarko Petroleum Corp.	7.25		Deb	11/15/2096	BBB-	7.99	7.73	7.84	6.37	6.98	7.17	6.85	6.83	6.72	6.37	6.61	6.32	6.98%	6.43%	
Union Pacific Resources Group	7.5		Deb	11/01/2096	BBB-	8.04	7.78	7.89	7.24	6.93	7.12	6.80	6.82	6.72	6.36	6.61	6.32	7.05%	6.43%	
Chesapeake Energy Corp.	6.5	165167BS5	Sr Nts	08/15/2017	BB+	6.26	6.06	6.01	5.94	6.04	6.17	6.17	6.28	6.20	6.06	6.37	6.10	6.14%	6.18%	
Chesapeake Energy Corp.	6.88	165167BU0	Sr Nts	11/15/2020	BB+	6.50	6.45	6.36	6.25	6.47	6.57	6.57	6.61	6.42	6.29	6.61	6.42	6.46%	6.44%	
Chesapeake Energy Corp.	7.62	165167BY2	Sr Nts	07/15/2013	BB+	6.93	6.83	6.80	6.91	6.96	6.99	6.99	7.15	7.19	7.12	7.22	7.21	7.03%	7.18%	
Chesapeake Energy Corp.	7.25	165167CC9	Sr Nt	12/15/2018	BB+	6.80	6.57	6.53	6.44	6.51	6.71	6.71	6.83	6.68	6.53	6.72	6.56	6.63%	6.60%	
Newfield Exploration Co.	6.62	651290AH1	Sr Sub Nts	09/01/2014	BB+	6.47	6.47	6.47	6.49	6.50	6.53	6.53	6.58	6.59	6.55	6.59	6.55	6.53%	6.56%	
Newfield Exploration Co.	6.62	651290AJ7	Sr Sub Nts	04/15/2016	BB+	6.40	6.41	6.41	6.41	6.42	6.42	6.42	6.46	6.56	6.43	6.46	6.43	6.44%	6.44%	
Sun Co	9	866762AK3	Deb	11/01/2024	BB+	7.55	7.57	7.60	7.23	7.04	7.11	6.91	6.64	6.54	6.63	6.86	6.75	7.04%	6.75%	
Suncor, Inc.	5.75	86764PAD1	Nts	01/15/2017	BB+	5.45	5.44	5.39	5.38	5.27	5.34	5.49	5.80	5.83	5.74	5.75	5.72	5.55%	5.74%	
Tesoro Corp.	6.25	881609AQ4	Sr Nt	11/1/2012	BB+	5.96	5.93	5.92	5.93	5.95	5.95	5.95	6.01	6.05	5.98	6.02	6.09	5.98%	6.03%	
Tesoro Corp.	6.62	881609AS0	Sr Nt	11/1/2015	BB+	6.43	6.43	6.43	6.40	6.43	6.48	6.46	6.50	6.58	6.49	6.52	6.51	6.47%	6.51%	
Williams Companies, Inc. (The)	10.25	969457AH3	Deb	07/15/2020	BB+	8.60	8.60	8.60										8.60%		
Williams Companies, Inc. (The)	9.375	969457AK6	Deb	11/15/2021	BB+	8.41	8.41	8.41										8.41%		
Williams Companies, Inc. (The)	8.875	969457AM2	Deb	09/15/2012	BB+			6.41										6.41%		
Williams Companies, Inc. (The)	7.625	969457AW0	Nts	07/15/2019	BB+		6.73	6.39	6.41	6.36	6.20	6.49	6.39	6.32	6.64	6.59	6.17	6.24	6.41%	6.33%
Williams Companies, Inc. (The)	7.5	969457BB5	Deb	01/15/2031	BB+		6.80	6.39	6.40	6.31	5.99	6.00	6.33	6.42	6.41	6.26	5.94	6.15	6.28%	6.12%
Williams Companies, Inc. (The)	7.75	969457BD1	Nts	06/15/2031	BB+		6.92	6.51	6.52	6.43	6.14	6.64	6.43	6.47	6.46	6.30	6.04	6.23	6.42%	6.19%
Williams Companies, Inc. (The)	7.875	969457BG4	Nts	09/01/2021	BB+		6.61	6.30	6.32	6.26	6.04	6.35	6.22	6.26	6.64	6.26	6.14	6.39	6.32%	6.26%
Williams Companies, Inc. (The)	8.125	969457BK5	Nts	03/15/2012	BB+		7.67	7.64	7.68	7.70	7.74	6.56	7.83	7.13	7.13	7.95	7.94	8.00	7.58%	7.96%
Williams Companies, Inc. (The)	8.75	969457BM1	Nts	03/15/2032	BB+		7.21	6.74	6.79	6.70	6.34	6.88	6.33	6.74	6.41	6.53	6.27	6.67	6.63%	6.49%
Cimarex Energy Co.	7.12	171798AA9	SrNts	05/01/2017	BB	6.75	6.75	6.75	6.75	6.73	6.81	6.81	7.01	6.98	6.78	6.91	6.83	6.82%	6.84%	
KN Energy	6.5	482620AN1	Deb	09/01/2013	BB	6.50	6.50		6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50%	6.50%
KN Energy	6.67	482620AS0	Deb	11/01/2027	BB	8.66	8.59	7.81	7.79	7.59	7.70	7.52	7.28	6.82	7.02	7.02	7.02	7.02	7.57%	7.02%
KN Energy	7.25	482620AW1	Sr Deb	03/01/2028	BB	9.07	8.92	7.87	7.84	7.64	7.76	7.58	7.34	7.68	7.07	7.07	7.07	7.07	7.68%	7.07%
Kinder Morgan Inc	6.5	494553AB6	Sr Nts	09/01/2012	BB	6.16	6.13	6.13	6.13	6.15	6.19	6.18	6.27	6.31	6.37	6.34	6.35	6.23%	6.35%	
Kinder Morgan Inc	5.15	494553AC4	Sr Nts	03/01/2015	BB	5.04	5.01	4.91	4.92	4.90	4.93	4.92	5.04	5.10	5.04	5.09	5.04	5.00%	5.08%	
Plains Exploration & Production Comp	7	726505AC4	SrNts	03/15/2017	BB	6.69	6.71	6.74	6.76	6.81	6.80	6.70	6.78	7.00	6.72	6.71	6.76	6.77%	6.73%	
Plains Exploration & Production Comp	7.75	726505AD2	SrNts	06/15/2015	BB	7.39	7.38	7.42	7.43	7.45	7.48	7.47	7.52	7.46	7.45	7.50	7.46%	7.47%		
Range Resources Corp.	7.38	75281AB5	Sr Sub Nts	07/15/2013	BB	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30%	7.30%	
Range Resources Corp.	7.5	75281AA4G	Sr Sub Nts	05/15/2016	BB	7.17	7.17	7.21	7.21	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.22%	7.23%	
Range Resources Corp.	7.5	75281AAH2	Sr Sub Nts	10/01/2017	BB	7.04	7.05	7.00	7.00	7.03	7.06	7.04	7.09	7.08	7.00	7.07	7.05	7.04%	7.04%	
Range Resources Corp.	7.25	75281AAJ8	Sr Sub Nts	05/01/2018	BB	6.80	6.80	6.77	6.77	6.81	6.84	6.79	6.84	6.81	6.72	6.80	6.77	6.79%	6.76%	
Whiting Petroleum Corp.	7.25	966367AB8	Sr Sub Nts	05/01/2012	BB	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25%	7.25%	
Whiting Petroleum Corp.	7.25	966367AC6	Sr Sub Nts	05/01/2013	BB	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12%	7.12%	
Whiting Petroleum Corp.	7	966367AE2	Sr Sub Nts	02/01/2014	BB	6.60	6.57	6.57	6.52	6.48	6.51	6.52	6.60	6.57	6.48	6.57	6.55	6.55%	6.54%	
KN Energy /Kinder Morgan	7.45		Sr Deb	03/01/2098	BB	9.83	10.00	8.62	8.87	8.66	8.82	8.57	8.22	7.55	7.84	7.84	8.56%	7.84%		
El Paso Corp.	7.88	28336LAE9	Nts	06/15/2012	BB-	7.47	7.46	7.48	7.42	7.45	7.48	7.51	7.57	7.61	7.63	7.66	7.70	7.54%	7.66%	
Parker Drilling Co.	9.62	701081AM3	Sr Nts	10/01/2013	B+	9.33	9.33	0.00	9.32	9.33	9.33	9.33	9.33	9.33	9.33	9.33	9.33	9.33%	9.33%	
Swift Energy Co.	7.12	870738AF8	SrNts	06/01/2017	B+	6.97	6.98	6.96	6.95	6.93	7.04	6.92	7.20	7.27	7.08	7.16	7.06%	7.17%		
Atlas Pipeline Ptns	8.12	04939MAC3	Sr Nt	12/15/2015	B	7.85	7.78	7.80	7.80									7.81%		
Berry Petroleum Co.	8.25	058789AC9	Sr SubNts	11/01/2016	B	7.83	7.81	7.81	7.81	7.85	7.97	7.97	7.99	7.99	7.97	8.00	7.93	7.91%	7.97%	
Quicksilver Resources Inc.	7.12	74837RAC8	Sr Sub Nts	04/01/2016	B-	7.42	7.32	7.19	7.17	6.97	7.23	7.09	7.54	7.72	7.19	7.51	7.16	7.29%		
Stone Energy Corp.	6.75	861642AG1	Sr Sub Nts	12/15/2014	CCC+	6.87	6.78	6.80	6.77	6.77	6.78	6.80	6.85	7.03	6.81	6.85	6.85	6.83%	6.84%	
Delta Petroleum Corp.	7	247907AC2	Sr Nts	04/01/2015	D	10.52	9.72	9.12	8.97	8.92	9.21	9.03	9.03	9.33	9.45	9.09	8.13	9.21%	8.89%	
Amerada Hess Corp.	7.875	023551AF1	Nts	10/01/2029	NR	6.31	6.39	6.37	6.31	6.11	6.16	6.16	5.95					5.86	6.17%	
Atlantic Richfield	9.125	048825AV5	Deb	03/01/2011	NR	9.06	9.13												9.10%	
Brigham Exploration Co.	9.62	109178AB9	Sr Nts	05/01/2014	NR	9.16	9.16												9.16%	
Burlington Resources Fin	6.4	12201PAC0	Gtd Nt	8/15/2011	NR	6.03													6.03%	
El Paso Corp.	7	28336LAB5	Sr Nts	05/15/2011	NR	6.90	6.93	6.95	6.99	5.94	5.94	5.94	5.94	5.94	5.94	5.94	5.94	5.94	6.94%	
Encore Acquisition	6	29255WAG5	Sr Sub Nt	7/15/2015	NR														5.85%	
Enterprise Products Oper	7.5	293791AB5	Sr Nts	02/01/2011	NR	7.50													7.50%	
Ferrellgas, L.P./Finance	6.75	315292AD4	SrNts	05/01/2014	NR	6.72	6.72												6.72%	
Ferrellgas Partners L.P.	8.75	315293MA6	Sr Nts	06/15/2012	NR	8.75	8.75												8.75%	
Forest Oil Corp.	8	346091AS0	Sr Nts	12/15/2011	NR	7.65	7.65	7.69	7.71	7.77	7.80	7.86	7.88	8.00	7.95	8.00			7.98%	
Forest Oil Corp.	7.75	346091AU5	Sr Nts	05/01/2014	NR	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65%		
Forest Oil Corp.	8	346091AW1	Sr Nts	12/15/2011	NR	7.65	7.65	7.69	7.71	7.77	7.80	7.86	7.88	8.00	7.95	8.00			7.98%	
Houston Exploration Co. (The)	7	442120AE1	Sr Sub Nts	06/15/2013	NR	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00%	7.00%	
KCS Energy, Inc.	7.125	482434AF4	Sr Nts	04/01/2012	NR	7.10	7.12	7.12	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13	7.13%	
Kerr-McGee Corp.	6.875	492386AS6	Nts	09/15/2011	NR	6.64	6.67	6.70	6.72	6.76	6.76	6.83	6.86	6.88						

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Penn Virginia Corp.	4.5	707882AA4	Sr Sub Nt Conv	11/15/2012	NR	4.53	4.48	4.37	4.37						4.52			4.45%	4.52%
Petrohawk Energy Corp.	9.12	716495AB2	Sr Nts	07/15/2013	NR	8.73												8.73%	
Phillips Petroleum	9.375	718507AR7	Nts	02/15/2011	NR	9.34												9.34%	
Plains All American Pipeline, L.P.	7.75	726503AD7	Sr Nts	10/15/2012	NR	6.96	6.99	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00%	7.00%	
Plain Explor & Prod	8.75	726507AC0	Sr Sub Nts'B'	07/01/2012	NR	8.25	8.25	8.25	8.25	8.25	8.25							8.25%	
Pride International, Inc.	7.38	74153QAF9	Sr Nts	07/15/2014	NR	7.20												7.20%	
Stone Energy Corp.	8.25	861642AE6	Sr Sub Nts	12/15/2011	NR	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25	8.25%	8.25%
Sunoco, Inc.	6.75	86764PAB5	Nts	04/01/2011	NR	6.70	6.72											6.71%	
Swift Energy Co.	7.62	870738AE1	SrNts	07/15/2011	NR	7.48	7.48		7.48	7.48	7.48	7.48						7.48%	
TEPPCO Partners, L.P.	6.125	872384AB8	Sr Nts	02/01/2013	NR	5.65	5.68	5.71	5.71	5.69	5.72	5.74	5.76	5.80	5.81	5.82	5.86	5.75%	5.83%
Varco International, Inc.	7.25	922122AB2	Sr Nts	05/01/2011	NR	7.14	7.17	7.21	7.25									7.19%	
Williams Companies, Inc. (The)	7.125	969457BF6	Nts	09/01/2011	NR	6.95	6.93	6.96	6.99	7.03	7.07	7.10	7.13	7.13				7.03%	
Williams Ptns L P	7.5	96950HAB6	Sr Nt 144a	6/15/2011	NR	7.32	7.36	7.39	7.43	7.48								7.40%	

Counts of data

196 191 181 186 181 192 190 190 190 187 186 187 212 191

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
AAA's	5.05%	5.01%
AA's	6.38%	6.07%
A's	5.97%	5.73%
BBB's	6.05%	5.92%
BB's	6.85%	6.71%
B'S	7.72%	7.94%
CCC's	6.83%	6.84%
D	9.21%	8.89%
NR's	7.20%	6.83%
ALL	6.37%	6.11%
BBB- & Above	5.95%	5.79%
BB- & Above	6.14%	5.97%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year.

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
XTO Energy Inc.	7.5	98385XAA4	Sr Nts	04/15/2012	AAA						2.04	2.57	3.26	3.84				0.61	2.46%	0.61%
XTO Energy Inc.	6.25	98385XA00	Sr Nts	04/15/2013	AAA						1.41	1.52	1.71	1.97	0.02	0.02	0.02	0.79	1.06%	0.28%
XTO Energy Inc.	4.9	98385XA08	Sr Nts	02/01/2014	AAA						1.58	1.47	0.02	0.21	0.32	0.45	0.75	0.69%	0.51%	
XTO Energy Inc.	5.3	98385XAG1	Sr Nts	06/30/2015	AAA						1.68	1.36	1.18	1.39	1.51	1.54	1.05	1.39%	1.37%	
XTO Energy Inc.	5.65	98385XA09	Sr Nts	04/01/2016	AAA						2.22	1.93	1.72	1.78	1.08	0.88	1.09	1.53%	1.02%	
XTO Energy Inc.	6.1	98385XA05	Sr Nts	04/01/2016	AAA						4.98	4.71	4.27	3.76	3.90	3.76	3.61	4.14%	3.76%	
XTO Energy Inc.	5.9	98385XA02	Sr Nts	08/01/2012	AAA						0.25	0.63	1.18	1.65	2.02	2.48	0.92	1.30%	1.81%	
XTO Energy Inc.	6.25	98385XAL0	Sr Nts	08/01/2017	AAA						2.41	2.08	2.10	2.13	2.24	2.22	1.93	2.16%	2.13%	
XTO Energy Inc.	6.75	98385XAM8	Sr Nts	08/01/2037	AAA						4.76	4.56	4.12	3.44	3.61	3.76	3.51	3.97%	3.63%	
XTO Energy Inc.	4.62	98385XAN6	Sr Nts	06/15/2013	AAA						0.90	0.95	1.07	1.27	1.43	1.58	0.72	1.13%	1.24%	
XTO Energy Inc.	5.5	98385XAP1	Sr Nts	06/15/2018	AAA						3.07	2.72	2.15	2.05	2.22	2.15	1.77	2.30%	2.05%	
XTO Energy Inc.	6.38	98385XAQ9	Sr Nts	06/15/2038	AAA						4.95	4.56	4.03	3.54	3.98	3.81	3.61	4.07%	3.80%	
Texaco Capital	9.75	881685AN1	Gtd Deb	03/15/2020	AA	5.35	5.18	5.20	5.16	4.49	4.64	3.79	3.56	3.66	3.29	3.44	3.42	4.27%	3.38%	
Texaco Capital	8.875	881685AV3	Gtd Deb	09/01/2021	AA	5.11	4.94	4.96	4.92	4.46	4.61	3.59	3.34	3.44	3.56	3.68	3.42	4.17%	3.55%	
Texaco Capital	8.625	881685AX9	Gtd Deb	11/15/2031	AA	6.12	5.84	5.86	5.83	5.49	5.66	4.93	4.68	4.37	4.00	4.07	3.91	5.06%	3.99%	
Texaco Capital	8.625	881685AY7	Gtd Deb	04/01/2032	AA	6.13	5.85	5.87	5.83	5.55	5.71	4.98	4.73	4.42	3.98	4.04	3.91	5.08%	3.98%	
Texaco Capital	8	881685BB6	Gtd Deb	08/01/2032	AA	6.12	5.83	5.85	5.82	5.51	5.69	4.95	4.71	4.39	4.54	4.61	4.41	5.20%	4.52%	
Texaco Capital	7.5	881685BD2	Gtd Deb	03/01/2043	AA	6.84	6.76	6.80	6.77	6.71	6.76	6.73	6.76	6.83	6.83	6.88	6.91	6.80%	6.87%	
Atlantic Richfield	9	048825AW3	Deb	04/01/2021	A	5.88	5.91	5.94	5.39	5.37	5.17	5.17	4.74	4.45	4.56	4.49	4.87	5.16%	4.64%	
Atlantic Richfield	9	048825AY9	Deb	05/01/2031	A	7.00	6.92	6.93	6.65	6.39	6.32	6.32	6.31	5.80	6.05	5.84	5.71	6.35%	5.87%	
Atlantic Richfield	9.125	048825AZ6	Deb	08/01/2031	A	6.96	6.88	6.89	6.61	6.35	6.28	6.28	6.26	5.75	5.98	5.86	5.66	6.31%	5.83%	
Atlantic Richfield	8.25	048825BA0	Deb	02/01/2022	A	5.43	5.46	5.49	5.19	4.87	4.67	4.67	4.24	3.95	4.12	4.05	3.92	4.67%	4.03%	
Atlantic Richfield	8.75	048825BB8	Deb	03/01/2032	A	7.00	6.67	6.68	6.40	6.14	6.07	6.07	5.86	5.35	5.54	5.42	5.26	6.04%	5.41%	
Atlantic Richfield	8.5	048825BC6	Deb	04/01/2012	A	2.47	2.59	2.56	2.00	0.91	0.84	0.84	1.13	1.17			2.12	1.66%	2.12%	
Burlington Resources Inc.	9.125	122014AE3	Deb	10/01/2021	A	4.63	4.71	4.72	4.67	4.38	4.27	4.27	3.56	3.34	3.49	3.56	3.57	4.10%	3.54%	
Burlington Resources Inc.	8.2	122014AH6	Deb	03/15/2025	A	5.58	5.66	5.72	5.67	5.38	5.25	5.25	4.78	4.56	4.44	5.00	4.87	5.18%	4.77%	
Burlington Resources Inc.	6.875	122014AJ2	Deb	02/15/2026	A	5.55	5.81	5.87	5.82	5.53	5.17	5.17	4.70	4.48	4.83	4.94	4.77	5.22%	4.85%	
Burlington Resources Inc.	7.375	122014AL7	Deb	03/01/2029	A	5.80	5.77	5.81	5.78	5.55	5.55	5.55	5.12	4.47	4.68	4.76	4.61	5.29%	4.68%	
Burlington Resources Fin	7.2	12201PAB2	Gtd Nt	8/15/2031	A	5.53	5.46	5.48	5.41	5.22	5.22	5.22	4.81	4.37	4.46	4.59	4.54	5.03%	4.53%	
Conoco Inc	6.95	208251AE8	Nts	04/15/2029	A	5.13	5.18	5.26	5.23	4.99	4.93	4.93	4.61	4.13	3.98	4.24	4.01	4.72%	4.08%	
Conoco Phillips	4.75	20825CAE4	Nts	10/15/2012	A	0.69	0.78	0.81	0.71	0.75	0.53	0.53	0.63	0.85	0.78	0.92	0.95	0.74%	0.88%	
Conoco Phillips	5.9	20825CAF1	Nts	10/15/2032	A	5.32	5.24	5.31	5.31	5.07	5.07	5.07	4.60	4.25	4.42	4.30	4.21	4.85%	4.31%	
Conoco Funding	7.25	20825UAC8	Sr Nt	10/15/2031	A	5.38	5.41	5.43	5.42	5.17	5.17	5.17	4.79	4.35	4.27	4.49	4.50	4.96%	4.42%	
Louisiana Land/Exp	7.625	546268AF0	Deb	04/15/2013	A	2.03	2.20	2.23	2.10	2.24	1.90	2.06	2.41	2.88	0.02	0.02	1.20	1.77%	0.41%	
Louisiana Land/Exp	7.65	546268AG8	Deb	12/01/2023	A	4.83	4.91	5.64	5.59	4.88	4.90	4.54	4.17	4.10	4.03	4.10	3.91	4.63%	4.01%	
Occidental Petroleum Corp.	9.25	674599BE4	Sr Deb	08/01/2019	A	4.31	4.34	4.33	4.28	3.83	3.98	3.66	3.22	3.09	3.95	3.61	3.52	3.84%	3.69%	
Occidental Petroleum Corp.	7.2	674599BM6	Sr Deb	04/01/2022	A	5.94	5.84	5.80	5.80							4.93	4.50	4.47	5.34%	4.63%
Occidental Petroleum Corp.	7.2	674599BM6	Sr Deb	4/1/2028	A	5.94	5.84	5.84	5.80	5.54	5.83	5.59	5.15	4.64	4.93	4.50	4.47	4.47	5.34%	4.63%
Occidental Petroleum Corp.	8.45	674599FT1	Sr Nts	02/15/2029	A	6.17	6.09	6.09	6.04	5.81	5.95	5.71	5.20	4.66	5.06	4.63	4.59	5.50%	4.76%	
Occidental Petro	8.75	67461FED5	MTN Tranche # Tr	1/15/2023	A	6.08	6.11	6.14	6.09	5.78	5.90	5.56	4.93	4.73	4.90	4.82	4.67	5.48%	4.80%	
Phillips Petroleum	6.65	718507BH8	Deb	07/15/2018	A	3.67	3.69	3.89	3.79	3.27	3.43	3.11	2.95	2.95	2.93	3.02	2.52	3.27%	2.82%	
Phillips Petroleum	7	718507BK1	Deb	03/30/2029	A	5.35	5.32	5.36	5.33	5.10	5.29	5.10	4.76	4.32	4.10	4.56	4.41	4.92%	4.36%	
ANR Pipeline	7.38	001814AQ5	Deb	2/15/2024	A-	5.36	5.39	5.21	5.01	4.76	4.89	4.89	4.24	4.35	4.51	4.49	4.17	4.77%	4.39%	
ANR Pipeline	9.62	001814AR3	Deb	11/1/2021	A-	4.81	4.96	4.89	4.84	4.52	4.27	4.27	4.13	3.95	3.63	3.59	3.82	4.31%	3.68%	
Apache Corp.	7	037411A4S1	Deb	6/1/2025	A-	6.77	6.70	6.73	6.70	5.46	5.27	5.27	4.69	4.40	4.65	4.68	4.37	5.47%	4.57%	
Apache Corp.	7.7	037411AJ4	Nts	03/15/2026	A-	4.97	4.91	4.91	4.85	4.75	4.68	4.68	4.10	3.98	4.00	3.89	4.29	4.50%	4.06%	
Apache Corp.	7.95	037411AK1	Nts	04/15/2026	A-	5.16	5.10	5.07	4.94	4.75	4.68	4.68	4.10	3.98	4.00	3.89	4.29	4.55%	4.06%	
Apache Corp.	7.38	037411AM7	Deb	08/15/2047	A-	6.10	6.04	6.08	5.96	5.72	5.70	5.70	5.00	4.54	4.41	4.32	4.41	5.33%	4.38%	
Apache Corp.	7	037411AN5	Sr Nts	02/01/2018	A-	3.76	3.91	3.92	3.83	3.40	3.30	3.30	2.82	2.68	2.78	2.66	2.54	3.24%	2.66%	
Apache Corp.	7.62	037411AP0	Sr Nts	07/01/2019	A-	4.71	4.81	4.45	4.39	4.10	4.03	4.03	3.47	3.25	3.51	3.40	3.23	3.95%	3.38%	
Apache Corp.	6.25	037411AQ8	Nts	04/15/2012	A-	0.88	1.04	1.05	0.63	0.67	0.70	0.70	0.76	0.98	1.08	1.02	1.08	0.88%	1.06%	
Apache Corp.	6	037411AR6	Nts	01/15/2037	A-	5.68	5.58	5.57	5.49	5.21	5.20	5.20	4.74	4.37	4.22	4.27	4.13	4.97%	4.21%	
Apache Corp.	5.62	037411AS4	Nts	01/15/2017	A-	3.12	3.31	3.27	3.05	2.61	2.34	1.98	1.93	1.70	1.77	1.76	2.43%	1.74%		
Apache Corp.	5.25	037411AT2	Nts	04/15/2013	A-	1.30	1.32	1.44	1.17	0.85	0.77	0.77	0.67	0.94	0.67	0.74	0.72	0.95%	0.71%	
Diamond Offshore Drilling, Inc.	5.15	25271CAG7	Sr Nts	09/01/2014	A-	2.43	2.46	2.54	2.42	1.60	1.73	1.56	1.78	2.21	2.22	2.25	1.82	2.09%	2.10%	
Diamond Offshore Drilling, Inc.	4.88	25271CAJ1	Sr Nts	07/01/2015	A-	2.91	2.91	2.94	2.89	2.41	2.52	2.19	2.24	2.51	2.54	2.46	2.33	2.57%	2.44%	
EOG Resources, Inc.	5.88	26875PAA9	Sr Nts	09/15/2017	A-	3.55	3.73	3.76	3.71	3.17	3.83	2.67	2.52	2.61	2.40	2.30	2.24	3.04%	2.31%	
Apache Corp.	6.65	293562AD6	Nts	04/01/2028	A-	5.97	5.90	5.86	5.83	5.56	5.72	5.37	5.07	4.62	4.49	4.34	4.21	5.25%	4.35%	
Devon Fin Corp	7.625	251799AA0	Sr Deb	11/01/2096	A-	6.37	6.30	6.34	6.15	5.98	6.10</td									

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Enbridge Energy Partners, L.P.	5.95	29250RAD8	Sr Nts 'B'	06/01/2033	BBB	6.42	6.04	6.06	6.03	5.76	5.93	5.56	5.42	5.10	5.35	4.95	4.86	5.62%	5.05%	
Enbridge Energy Partners, L.P.	5.88	29250RAH9	Nt	12/15/2016	BBB	3.66	3.59	3.78	3.51	3.26	3.27	2.29	2.12	2.78	2.75	2.60	2.72	3.03%	2.69%	
Energen Corp.	5	29265NAQ1	Nts	10/01/2013	BBB	3.30	3.50	3.67	3.60	2.88	2.95	2.93	2.87	3.31	3.19	3.16	3.16	3.21%	3.17%	
Kinder Morgan Energy Partners, L.P.	7.4	494550AJ5	Nts	03/15/2031	BBB	6.38	6.34	6.32	6.18	5.95	6.17	5.90	5.93	5.69	5.75	5.76	5.71	6.01%	5.74%	
Kinder Morgan Energy Partners, L.P.	7.125	494550AK2	Nts	03/15/2012	BBB	1.30	1.45	1.11	0.75	2.04	2.62	3.16	3.92	4.45	1.70	1.91	1.58	2.17%	1.73%	
Kinder Morgan Energy Partners, L.P.	7.75	494550AL0	Nts	03/15/2032	BBB	6.40	6.33	6.32	6.14	5.93	6.15	5.86	5.93	5.69	5.82	5.78	5.73	6.01%	5.78%	
Kinder Morgan Energy Partners, L.P.	7.3	494550AQ9	Sr Nts	08/15/2033	BBB	6.30	6.38	6.32	6.16	5.92	6.12	5.86	5.97	5.76	5.92	5.93	5.91	6.05%	5.92%	
Kinder Morgan Energy Partners, L.P.	5	494550AR7	Sr Nts	12/15/2013	BBB	1.61	1.80	1.89	1.73	1.93	2.07	0.80	1.11	1.34	1.76	1.78	1.86	1.64%	1.80%	
Kinder Morgan Energy Partners, L.P.	6	494550AU0	Sr Nt	2/1/2017	BBB	3.87	3.95	3.78	3.68	3.34	3.59	3.18	2.78	3.10	3.18	3.32	3.17	3.41%	3.22%	
Kinder Morgan Energy Partners, L.P.	6.5	494550AV8	Sr Nt	2/1/2037	BBB	6.32	6.32	6.26	6.15	5.88	6.17	5.76	5.98	5.95	5.85	5.88	5.73	6.02%	5.82%	
Kinder Morgan Energy Partners, L.P.	6.95	494550AW6	Sr Nt	1/15/2038	BBB	6.35	6.37	6.37	6.14	5.00	6.27	5.83	6.08	6.05	5.85	5.85	5.96	6.01%	5.89%	
Lakehead Pipe Line Co	7	511546AA1	Sr Nt	10/1/2018	BBB	4.68	4.79	4.82	4.72	4.27	4.39	3.98	3.73	3.56	3.73	3.76	3.67	4.18%	3.72%	
Lakehead Pipe Line Co	7.12	511546AB9	Sr Nt	10/1/2028	BBB	6.52	6.45	6.46	6.43	5.64	5.81	5.56	5.31	4.78	4.90	4.78	4.67	5.61%	4.78%	
Lakehead Pipe Line Co	7.9	511546AE3	Nt	11/21/2012	BBB	2.06	2.21	2.22	2.13	3.39	0.02	0.16	0.60	1.15	1.58	2.08	2.12	1.64%	1.93%	
Marathon Oil Corp.	6.8	565849AB2	Nts	03/15/2032	BBB	5.73	5.65	5.79	5.77	5.54	5.78	5.51	5.07	5.29	5.07	4.75	5.04	5.42%	4.95%	
Murphy Oil Corp.	7.05	626717AA0	Nts	05/01/2029	BBB	6.08	6.13	5.92	5.88	5.59	5.73	5.49	5.54	5.01	5.42	5.00	5.11	5.58%	5.18%	
ONEOK Partners, L.P.	6.38	626717AB8	Nts	05/01/2012	BBB	1.81	1.50	1.51	1.51	1.72	2.17	2.59	3.10	3.52	1.61	1.69	1.70	2.04%	1.67%	
ONEOK Partners, L.P.	5.9	68266NA1	Gtd Sr Nt	4/1/2012	BBB	1.34	1.39	1.14	0.89	1.56	2.08	2.37	3.10	3.62	1.35	1.35	1.49	1.81%	1.40%	
ONEOK Partners, L.P.	6.15	68266NA9B	Gtd Sr Nt	10/1/2016	BBB	3.30	3.54	3.54	3.49	2.79	2.88	2.46	2.80	3.17	2.85	2.85	2.79	3.04%	2.83%	
ONEOK Partners, L.P.	6.65	68268NAC7	Gtd Sr Nt	10/12/2036	BBB	6.20	6.10	6.16	6.04	5.75	5.98	5.59	5.71	5.44	5.37	5.20	5.31	5.74%	5.29%	
USX Corp.	9.375	902905AK4	Deb	02/15/2012	BBB	1.45	1.53	1.35	1.24	3.45	4.18	4.82						1.99	2.50%	1.99%
USX Corp.	9.375	902905AL2	Deb	05/15/2022	BBB	5.43	6.15	6.18	6.14	5.76	5.92	5.59	5.12	5.01	5.17	5.10	4.79	5.53%	5.02%	
USX Corp.	9.125	902905AM0	Deb	01/15/2013	BBB	2.83	2.90	2.87	2.71	3.62	3.90	4.07	0.12	0.74	1.23	1.76	2.47	2.44%	1.82%	
USX Corp.	8.5	902905AN8	Deb	03/01/2023	BBB	5.62	5.65	5.67	5.63	5.31	5.44	5.11	4.66	4.32	4.49	4.42	4.29	5.05%	4.40%	
USX Corp.	8.125	902905AQ1	Deb	07/15/2023	BBB	5.62	5.65	5.68	5.64	5.25	5.39	5.05	4.59	4.46	4.64	4.54	4.29	5.07%	4.49%	
Valero Energy	6.7	91913YAD9	Sr Nts	01/15/2013	BBB	2.76	2.83	2.83	2.69	2.39	2.66	2.78	0.02	0.06	0.35	0.78	1.34	1.79%	0.82%	
Valero Energy Corp. (New)	8.75	91913YAB6	Nts	06/15/2030	BBB	7.53	7.13	7.15	6.80	6.39	6.59	6.34	6.47	6.15	6.26	6.06	6.02	6.57%	6.11%	
Valero Energy Corp. (New)	6.875	91913YAD2	Nts	04/15/2012	BBB	1.10	1.45	1.25	1.23	3.49	2.21	2.65	3.26	3.77	1.22	1.10	1.26	2.00%	1.19%	
Valero Energy Corp. (New)	7.5	91913YAE0	Nts	04/15/2032	BBB	6.51	6.50	6.59	6.38	6.10	6.47	5.98	6.42	6.15	5.82	5.93	6.03	6.24%	5.93%	
Valero Energy Corp. (New)	4.75	91913YAG5	Nts	06/15/2013	BBB	1.92	1.82	1.87	1.74	1.38	1.51	1.55	1.65	2.01	1.53	1.49	1.49	1.65%	1.50%	
Valero Energy Corp. (New)	4.75	91913YAK6	Sr Nts	04/01/2014	BBB	2.89	3.04	2.65	2.54	2.27	2.39	2.23	2.19	2.35	1.86	1.83	1.83	2.34%	1.84%	
Valero Energy Corp. (New)	6.62	91913YAL4	Nts	06/15/2037	BBB	6.42	6.45	6.57	6.38	6.08	6.30	5.98	6.05	6.05	5.89	6.10	6.06	6.19%	6.02%	
Valero Energy Corp. (New)	6.12	91913YAM2	Nts	06/15/2017	BBB	4.23	4.13	4.13	4.06	3.49	3.63	3.17	3.61	3.98	3.70	3.62	3.74	3.79%	3.69%	
Anadarko Petroleum Corp.	7.25	032511AH0	Deb	03/15/2025	BBB	6.22	5.98	6.10	5.87	5.45	5.40	5.40	5.23	5.27	5.05	5.25	4.89	5.51%	5.06%	
Anadarko Petroleum Corp.	7	032511AL1	Deb	11/15/2025	BBB	7.08	6.73	6.83	6.57	6.21	6.26	6.26	6.17	6.13	5.66	5.78	5.47	6.26%	5.64%	
Anadarko Petroleum Corp.	6.62	032511AM9	Deb	01/15/2028	BBB	6.98	6.63	6.72	6.45	6.08	6.13	6.13	6.10	6.06	5.59	5.70	5.61	6.16%	5.63%	
Anadarko Petroleum Corp.	7.2	032511AN7	Deb	03/15/2029	BBB	7.24	6.82	6.94	6.67	6.28	6.34	6.34	6.16	6.12	5.65	5.77	5.46	6.32%	5.63%	
Anadarko Petroleum Corp.	6.12	032511AT4	Nts	03/15/2012	BBB	1.60	1.63	1.66	1.40	1.30	1.35	1.36	1.75	2.18	1.63	2.03	1.98	1.65%	1.88%	
Anadarko Petroleum Corp.	5	032511AU1	Nts	10/01/2012	BBB	2.14	2.09	2.21	1.96	1.87	1.94	1.94	2.13	2.73	1.60	2.10	1.88	2.05%	1.86%	
Anadarko Petroleum Corp.	5.95	032511AX5	Nts	09/15/2016	BBB	4.00	3.98	4.06	3.74	3.22	3.07	3.07	3.41	4.04	2.70	3.48	2.89	3.47%	3.02%	
Anadarko Petroleum Corp.	6.45	032511AY3	Nr Nts	09/15/2036	BBB	6.64	6.38	6.48	6.31	5.98	5.99	5.99	6.31	6.07	5.38	5.63	5.41	6.05%	5.47%	
Boardwalk Pipelines Llc	5.5	096629AAB8	Nt	2/1/2017	BBB	4.26	4.37	4.20	4.09	3.61	3.14	3.14	3.35	3.49	3.68	3.78	3.54	3.72%	3.67%	
Boardwalk Pipelines Lp	5.88	096630A06	Sr Nt	11/15/2016	BBB	3.82	3.94	4.00	3.89	3.26	3.14	3.14	3.21	3.19	3.43	3.55	3.09	3.47%	3.36%	
Energy Transfer Partners, L.P.	5.95	29273RAD5	Sr Nt	8/1/2012	BBB	3.11	3.18	3.25	3.08	2.78	3.06	2.78	2.16	3.35	3.30	3.28	3.17	3.04%	3.25%	
Energy Transfer Partners, L.P.	5.65	29273RAE9	Sr Nt	2/15/2017	BBB	1.75	1.86	2.01	1.71	0.90	0.84	1.11	1.69	2.50	1.60	1.87	1.91	1.65%	1.79%	
Energy Transfer Partners, L.P.	6.62	29273RAF6	Nts	10/15/2036	BBB	6.15	6.16	6.26	6.13	5.95	6.37	6.10	6.32	6.39	6.11	6.04	6.21	6.18%	6.12%	
Enterprise Products Oper	6.375	293791AD1	Sr Nts 'B'	02/01/2013	BBB	1.60	1.77	1.83	1.70	2.27	2.57	2.71	0.02	0.47	0.62	1.25	1.99	1.57%	1.29%	
Enterprise Products Oper	5.6	293791AN9	Sr Nts 'B'	10/15/2014	BBB	2.36	2.44	2.48	2.30	1.61	1.77	1.63	2.19	2.30	2.05	2.17	2.05	2.11%	2.09%	
Enterprise Products Oper	6.65	293791AP4	Sr Nts 'B'	10/15/2034	BBB	6.10	6.07	6.12	6.02	5.78	5.95	5.61	5.69	5.47	5.07	5.51	5.27	5.72%	5.28%	
Enterprise Products Oper	5	293791AR0	Sr Nts 'B'	03/01/2015	BBB	2.82	3.07	3.06	2.92	2.51	2.63	2.22	2.21	2.00	1.90	1.93	2.07	2.45%	1.97%	
Enterprise Products Oper	5.75	293791AT6	Sr Nts 'B'	03/01/2035	BBB	6.03	6.08	6.09	6.01	5.77	5.98	5.64	5.71	5.44	5.12	5.54	5.27	5.72%	5.31%	
Kerr-McGee Corp.	7.125	492386AK3	Deb	10/15/2027	BBB	6.67	6.16	6.26	6.04	5.83	6.05	5.69	5.66	5.44	5.44	5.25	5.34	5.87%	5.47%	
Kerr-McGee Corp.	7.875	492386AT4	Nts	09/15/2031	BBB	6.75	6.44	6.60	6.37	5.88	6.10	5.81	6.05	5.88	5.37	5.88	5.71	6.07%	5.65%	
Pioneer Natural Resources Co.	6.95	492386AU1	Nts	07/01/2024	BBB	5.97	5.64	5.78	5.69	5.27	5.42	4.95	5.07	5.15	4.76	5.00	4.87	5.30%	4.88%	
Pioneer Natural Resources Co.	7.2	723787AB3	Sr Nts	01/15/2028	BBB	6.92	6.60	6.77	6.59	6.66	6.72	6.47	6.59	6.63	6.63	5.92	5.83	6.52%	6.13%	
Pioneer Natural Resources Co.	6.88	723787AF4	Sr Nts	05/01/2018	BBB	5.58	5.41	5.57	5.44	5.20	5.47	5.15	5.42	5.59	5.50	4.61	4.47	5.28%	4	

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

**STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY**

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Swift Energy Co.	7.62	870738AE1	SrNts	07/15/2011	NR	6.59	6.59	6.59	6.59	6.59	6.59	6.59	0.02	0.47	0.72	1.33	2.03	6.59%	1.36%
TEPPCO Partners, L.P.	6.125	872384AB8	Sr Nts	02/01/2013	NR	1.87	2.03	2.10	1.97	2.18	2.48	2.60						1.65%	1.16%
Varco International, Inc.	7.25	922122AB2	Sr Nts	05/01/2011	NR	1.09	1.43	0.95										1.25%	1.25%
Whiting Petroleum Corp.	7.25	966387AB8	Sr Sub Nts	05/01/2012	NR	7.25	7.25	7.25	7.25	7.25	7.25	7.25						7.25%	7.25%
Whiting Petroleum Corp.	7.25	966387AC6	Sr Sub Nts	05/01/2013	NR	6.57	6.57	6.57	6.57	6.57	6.57	6.57						6.57%	6.57%
Williams Companies, Inc. (The)	7.125	969457BF6	Nts	09/01/2011	NR	2.85	1.83	1.74	1.62									2.01%	2.01%
Williams Ptns L P	7.5	96950HAB6	Sr Nt 144s	6/15/2011	NR	0.96	1.21	0.89	0.68									0.94%	0.94%
Counts of data						190	187	187	183	177	189	185	184	184	184	183	188	206	192

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
AAA's	2.18%	1.85%
AA's	5.10%	4.38%
A's	4.28%	3.76%
BBB's	4.41%	4.08%
BB's	5.58%	5.40%
B'S	7.61%	7.70%
CCC's	7.18%	7.24%
D	15.55%	15.30%
NR's	5.11%	5.32%
ALL	4.71%	4.38%
BBB- & Above	4.20%	3.79%
BB- & Above	4.48%	4.09%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Liquid Pipelines
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
20 YR PLUS - BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
XTO Energy Inc.	6.1	98385XAJ5	Sr Nts	04/01/2036	AAA						4.98	4.71	4.27	3.76	3.90	3.76	3.61	4.14%	3.76%
XTO Energy Inc.	6.75	98385XAM8	Sr Nts	08/01/2037	AAA						4.76	4.56	4.12	3.44	3.61	3.76	3.51	3.97%	3.63%
XTO Energy Inc.	6.38	98385XAQ9	Sr Nts	06/15/2038	AAA						4.95	4.56	4.03	3.54	3.98	3.81	3.61	4.07%	3.80%
Texaco Capital	8.625	881685AX9	GtdDeb	11/15/2031	AA	6.12	5.84	5.86	5.83	5.49	5.66	4.93	4.68	4.37	4.00	4.07	3.91	5.06%	3.99%
Texaco Capital	8.625	881685AY7	GtdDeb	04/01/2032	AA	6.13	5.85	5.87	5.83	5.55	5.71	4.98	4.73	4.42	3.98	4.04	3.91	5.08%	3.98%
Texaco Capital	8	881685BB6	GtdDeb	08/01/2032	AA	6.12	5.83	5.85	5.82	5.51	5.69	4.95	4.71	4.39	4.54	4.61	4.41	5.20%	4.52%
Texaco Capital	7.5	881685BD2	GtdDeb	03/01/2043	AA	6.84	6.76	6.80	6.77	6.71	6.76	6.73	6.76	6.83	6.83	6.88	6.91	6.80%	6.87%
Atlantic Richfield	9	048825AY9	Deb	05/01/2031	A	7.00	6.92	6.93	6.65	6.39	6.32	6.32	6.31	5.80	6.05	5.84	5.71	6.35%	5.87%
Atlantic Richfield	9.125	048825AZ6	Deb	08/01/2031	A	6.96	6.88	6.89	6.61	6.35	6.28	6.28	6.26	5.75	5.98	5.86	5.66	6.31%	5.83%
Atlantic Richfield	8.75	048825BB8	Deb	03/01/2032	A	7.00	6.67	6.68	6.40	6.14	6.07	6.07	5.86	5.35	5.54	5.42	5.26	6.04%	5.41%
Burlington Resources Fin	7.2	12201PAB2	Gtd Nt	8/15/2031	A	5.53	5.46	5.48	5.41	5.22	5.22	5.22	4.81	4.37	4.46	4.59	4.54	5.03%	4.53%
ConocoPhillips	5.9	20825CAF1	Nts	10/15/2032	A	5.32	5.24	5.31	5.31	5.07	5.07	5.07	4.60	4.25	4.42	4.30	4.21	4.85%	4.31%
Conoco Funding	7.25	20825UAC8	Sr Nt	10/15/2031	A	5.38	5.41	5.43	5.42	5.17	5.17	5.17	4.79	4.35	4.27	4.49	4.50	4.96%	4.42%
Apache Corp.	7.38	037411AM7	Deb	08/15/2047	A-	6.10	6.04	6.08	5.96	5.72	5.70	5.70	5.00	4.54	4.41	4.32	4.41	5.33%	4.38%
Apache Corp.	6	037411AR6	Nts	01/15/2037	A-	5.68	5.58	5.57	5.49	5.21	5.20	5.20	4.74	4.37	4.22	4.27	4.13	4.97%	4.21%
Apache Corp.	7.625		Deb	11/01/2096	A-	6.37	6.30	6.34	6.15	5.98	6.10	5.64	5.51	5.22	5.10	5.27	5.03	5.75%	5.13%
Devon Fin Corp	7.95	251799AA0	Sr Deb	04/15/2032	BBB+	5.55	5.52	5.56	5.46	5.17	5.51	5.25	5.10	4.73	4.59	5.00	4.64	5.17%	4.74%
Enbridge Energy Partners, L.P.	5.95	29250RAD8	Sr Nts 'B'	06/01/2033	BBB	6.42	6.04	6.06	6.03	5.76	5.93	5.56	5.42	5.10	5.35	4.95	4.86	5.62%	5.05%
Kinder Morgan Energy Partners, L.P.	7.4	494550AJ5	Nts	03/15/2031	BBB	6.38	6.34	6.32	6.18	5.95	6.17	5.90	5.93	5.69	5.75	5.76	5.71	6.01%	5.74%
Kinder Morgan Energy Partners, L.P.	7.75	494550AL0	Nts	03/15/2032	BBB	6.40	6.33	6.32	6.14	5.93	6.15	5.86	5.93	5.69	5.78	5.73	6.01%	5.78%	
Kinder Morgan Energy Partners, L.P.	7.3	494550AQ9	Sr Nts	08/15/2033	BBB	6.30	6.38	6.32	6.16	5.92	6.12	5.86	5.97	5.76	5.92	5.93	5.91	6.05%	5.92%
Kinder Morgan Energy Partners, L.P.	6.5	494550AV8	Sr Nt	2/1/2037	BBB	6.32	6.32	6.26	6.15	5.88	6.17	5.76	5.98	5.95	5.85	5.88	5.73	6.02%	5.82%
Kinder Morgan Energy Partners, L.P.	6.95	494550AW6	Sr Nt	1/15/2038	BBB	6.35	6.37	6.37	6.14	5.00	6.27	5.83	6.08	6.05	5.85	5.85	5.96	5.89%	
Marathon Oil Corp.	6.8	565849AB2	Nts	03/15/2032	BBB	5.73	5.65	5.79	5.77	5.54	5.78	5.51	5.07	5.29	5.07	4.75	5.04	5.42%	4.98%
ONEOK Partners, L.P.	6.65	68268NAC7	Gtd Sr Nt	10/1/2036	BBB	6.20	6.10	6.16	6.04	5.75	5.98	5.59	5.71	5.44	5.37	5.20	5.31	5.74%	5.29%
Valero Energy Corp. (New)	7.5	91913YAE0	Nts	04/15/2032	BBB	6.51	6.50	6.59	6.38	6.10	6.47	5.98	6.42	6.15	5.82	5.93	6.03	6.24%	5.93%
Valero Energy Corp. (New)	6.62	91913YAL4	Nts	06/15/2037	BBB	6.42	6.45	6.57	6.38	6.08	6.30	5.98	6.05	5.89	6.10	6.06	6.19%	6.02%	
Anadarko Petroleum Corp.	6.45	032511AY3	Sr Nts	09/15/2036	BBB-	6.64	6.38	6.48	6.31	5.98	5.99	5.99	6.31	6.07	5.38	5.63	5.41	6.05%	5.47%
Energy Transfer Partners, L.P.	6.62	29273RAF6	Sr Nt	10/15/2036	BBB-	6.15	6.16	6.26	6.13	5.95	6.37	6.10	6.32	6.39	6.11	6.04	6.21	6.18%	6.12%
Enterprise Products Oper	6.65	293791PA4	Sr Nts'B'	10/15/2034	BBB-	6.10	6.07	6.12	6.02	5.78	5.95	5.61	5.69	5.47	5.07	5.51	5.27	5.72%	5.28%
Enterprise Products Oper	5.75	293791AT6	Sr Nts'B'	03/01/2035	BBB-	6.03	6.08	6.09	6.01	5.77	5.98	5.64	5.71	5.44	5.12	5.54	5.27	5.72%	5.31%
Kerr-McGee Corp.	7.875	492386AT4	Nts	09/15/2031	BBB-	6.75	6.44	6.60	6.37	5.88	6.10	5.81	6.05	5.88	5.37	5.88	5.71	6.07%	5.65%
Plains All Amem Pipeline L P	6.7	72650RAM4	Sr Nt	5/15/2036	BBB-	6.40	6.21	6.17	6.12	5.88	6.19	5.71	5.64	5.59	5.78	5.31	5.89%	5.56%	
Anadarko Petroleum Corp.	7.73		Deb	09/15/2096	BBB-	7.78	7.64	7.71	7.22	6.98	7.15	6.82	6.93	6.82	6.42	6.66	6.37	7.04%	6.48%
Anadarko Petroleum Corp.	7.25		Deb	11/15/2096	BBB-	7.99	7.74	7.83	7.32	6.98	7.17	6.84	6.83	6.71	6.37	6.61	6.32	7.06%	6.43%
Union Pacific Resources Group	7.5		Deb	11/01/2096	BBB-	8.05	7.78	7.88	7.25	6.93	7.13	6.78	6.82	6.71	6.37	6.61	6.32	7.05%	6.43%
Williams Companies, Inc. (The)	7.5	969457BB5	Deb	01/15/2031	BB+	6.57	6.00	6.01	5.88	5.42	6.22	5.90	6.00	5.98	5.77	5.30	5.61	5.89%	5.56%
Williams Companies, Inc. (The)	7.75	969457BD1	Nts	06/15/2031	BB+	6.67	6.10	6.11	5.98	5.54	6.27	5.95	6.03	6.00	5.77	5.40	5.66	5.96%	5.61%
Williams Companies, Inc. (The)	8.75	969457BM1	Nts	03/15/2032	BB+	6.82	6.20	6.26	6.13	5.61	6.37	6.08	6.17	6.12	5.86	5.50	6.06	6.10%	5.81%
KN Energy /Kinder Morgan	7.45		Sr Deb	03/01/2098	BB	9.82	10.01	8.61	8.87	8.66	8.82	8.57	8.22	7.54	7.83	7.83	7.83	8.55%	7.83%
Amerada Hess Corp.	7.3	023551AJ3	Nts	08/15/2031	NR	5.70	5.84	5.84	5.72	5.44	5.52	5.52	5.38	5.09	5.01	5.51%	5.01%		

Counts of data

38 38 38 38 38 38 36 36 41 41 41 41 41 41 40 40 40 41 41 41

*Investment Grade (BBB- & Above)



Montana Department of
REVENUE

2012 Capitalization Rate Study

Railroads

MONTANA DEPARTMENT OF REVENUE

Direct Capitalization Rate Study
Industry: Class I Railroads
2012 Assessment Year

Equity Measures Calculated:

E/P estimates:

ALL	Median	
6.25%	6.59%	Yahoo
6.47%	6.64%	Value Line
6.36%	6.62%	Average of E/Ps

Inverse of P/E Ratios:

6.05%	6.40%	Yahoo
6.36%	6.42%	Value Line
6.20%	6.41%	Average of Inverse of the P/E
6.31%	6.67%	Inverse of median P/E, Value Line
6.28%	6.51%	Average of all above except median P/E

Mean = 6.29% 6.54%

Median = 6.31% 6.59%

Equity Measure NUOI = 6.25%

Debt Measure Calculated, Current Yield:

Annual	4th Qtr	
5.72%	5.42%	ALL
5.67%	5.35%	BBB- & Above
5.67%	5.35%	BB- & Above
Mean = 5.68%	5.38%	
Median = 5.67%	5.35%	

Debt Measure = 5.30%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate					
Equity	81.00%	x	6.25%	=	5.06%
Debt	19.00%	x	5.30%	=	1.01%
	100%				6.07%
		Direct Cap Rate NUOI		=	6.25%

Gross Cash Flow / Price:

Mean	Median	
10.38%	10.37%	Value Line

Equity Measure Gross = 11.00%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)					
Equity	81.00%	x	11.00%	=	8.91%
Debt	19.00%	x	5.30%	=	1.01%
	100%				9.92%
		Direct Cap Rate GCF		=	10.00%

MONTANA DEPARTMENT OF REVENUE

**Direct Capitalization Rate Study
Industry: Class III Railroads
2012 Assessment Year**

Equity Measures Calculated:

E/P estimates:

ALL	Median	
4.90%	4.90%	Yahoo
5.31%	5.31%	Value Line
5.11%	5.11%	Average of E/Ps

Inverse of P/E Ratios:

4.76%	4.76%	Yahoo
5.18%	5.18%	Value Line
4.97%	4.97%	Average of Inverse of the P/E
5.88%	5.88%	Inverse of median P/E, Value Line
5.04%	5.04%	Average of all above except median P/E

Mean = 5.21% 5.21%

Median = 5.18% 5.18%

Equity Measure NUOI = 6.50%

Debt Measure Calculated, Current Yield:

Annual	4th Qtr	
5.72%	5.42%	ALL
5.67%	5.35%	BBB- & Above
5.67%	5.35%	BB- & Above
Mean = 5.68%	5.38%	
Median = 5.67%	5.35%	

Debt Measure = 6.00%

Industry Market Capital Structure Net Utility Operating Income (NUOI) Rate					
Equity	75.00%	x	6.50%	=	4.88%
Debt	25.00%	x	6.00%	=	1.50%
	100%				6.38%
Direct Cap Rate NUOI					= 6.50%

Gross Cash Flow / Price:

Mean	Median	
10.33%	10.33%	Value Line

Equity Measure Gross = 11.50%

Industry Market Capital Structure Gross Cash Flow Rate (GCF)					
Equity	75.00%	x	11.50%	=	8.63%
Debt	25.00%	x	6.00%	=	1.50%
	100%				10.13%
Direct Cap Rate GCF					= 10.25%

MONTANA DEPARTMENT OF REVENUE

**Yield Capitalization Rate Study
Industry: Railroads
2012 Assessment Year**

Equity Measures Calculated:

Dividend Growth Model

Class I Class III

15.00%

Capital Asset Pricing Model

	Mean =	12.46%	11.42%
	Median =	12.46%	11.42%

Equity Measure FCF = 10.00% 11.50%

Debt Measures Calculated, Yield to Maturity:

	ALL DEBT		20 YEAR PLUS DEBT	
	Annual	4th Qtr	Annual	4th Qtr
ALL	4.05%	3.58%	5.44%	4.83%
BBB+ & Above	4.07%	3.54%	5.46%	4.85%
BBB & Above	4.00%	3.53%	5.44%	4.83%
Mean =	4.04%	3.55%	5.44%	4.84%
Median =	4.05%	3.54%	5.44%	4.83%

Debt Measure = 3.75%

CLASS I

Yield Cap Rate Free Cash Flow				
Equity	81.00%	x	10.00%	=
Debt	19.00%	x	3.75%	=
	100.00%			8.81%
Weighted Average Cost of Capital (WACC) =				9.00%

CLASS III

Yield Cap Rate Free Cash Flow				
Equity	75.00%	x	11.50%	=
Debt	25.00%	x	3.75%	=
	100.00%			9.56%
Weighted Average Cost of Capital (WACC) =				10.25%

Assumed Growth Rate = Inflation
see addendum for calculation

Growth = 2.05%

MONTANA DEPARTMENT OF REVENUE

Support for Industry Capital Structure
Industry: Railroads
2012 Assessment Year

A	B	C	D	E	F	G	H	I	J	K	L	M
Company	Ticker Symbol	(VL) Financial Strength	(VL) Shares (000)	(YAHOO) Avg. Price Common 4th Quarter	(VL) Book Value Per Share H/D	Mkt. Value Common	Book Value Common (000)	(VL) Book Value Preferred (000)	Mkt. Value Preferred (000) IxL	(VL) Book Value Debt (000)	Mkt/Book Debt Ratio	Mkt. Value Debt (000) KxL
Can. National Railway	CNI	A	459,400	74.567	24.562	34,255,927	11,284,000	0	0	5,531,000	1.00	5,531,000
Union Pacific	UNP	A	491,600	97.525	36.133	47,943,290	17,763,000	0	0	9,003,000	1.00	9,003,000
CSX Corp.	CSX	B++	1,111,000	20.953	7.831	23,279,153	8,700,000	0	0	8,051,000	1.00	8,051,000
Norfolk Southern	NSC	B++	357,400	70.860	29.852	25,325,364	10,669,000	0	0	6,567,000	1.00	6,567,000
Kansas City South'n	KSU	B+	102,600	62.490	23.634	6,411,474	2,424,800	6,300	6,300	1,621,600	1.00	1,621,600
Can. Pacific Railway	CP	B+	169,200	59.462	28.515	10,060,914	4,824,700	0	0	4,033,200	1.00	4,033,200
Genesee & Wyoming	GWR	B+	41,800	56.705	19.550	2,370,269	817,200	0	0	475,200	1.00	475,200
RailAmerica Inc.	RA	B	54,900	13.853	12.836	760,548	704,700	0	0	573,300	1.00	573,300
SUMS & AVERAGES - ALL						150,406,939	57,187,400	6,300	6,300	35,855,300		35,855,300
CLASS I SUMS & AVERAGES - ALL						147,276,122	55,665,500	6,300	6,300	34,806,800		34,806,800
CLASS I MEDIAN VALUE												
CLASS III SUMS & AVERAGES - ALL						3,130,817	1,521,900	0	0	1,048,500		1,048,500
CLASS III MEDIAN VALUE												

*All Negative values left out of calculations

INDUSTRY MARKET STRUCTURE					
	CLASS I RAILROADS	CLASS III RAILROADS	ALL RAILROADS		
COMMON	81.00%	147,276,122	75.00%	3,130,817	81.00% 150,406,939
DEBT	19.00%	34,813,100	25.00%	1,048,500	19.00% 35,861,600
TOTAL	100.00%	182,089,222	100.00%	4,179,317	100.00% 186,268,539

Notes/Rational for Changes to Guideline Companies

Developed a new Class III Rate for TY 2012

Added:

Genesee & Wyoming
RailAmerica Inc.

MONTANA DEPARTMENT OF REVENUE

**Support for Industry Capital Structure
Industry: Railroads
2012 Assessment Year**

A	B	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Company	Ticker Symbol	(YAHOO) EPS	(YAHOO) E/P	(VL) EPS	(VL) E/P	(VL) CF/S	(VL) CF/P	(YAHOO) P/E	(YAHOO) Inverse of P/E	(VL) P/E	(VL) Inverse of P/E	(VL) Median P/E	(VL) Inverse of Median P/E	(VL) Beta
Can. National Railway	CNI	5.02	6.73%	4.90	6.57%	6.95	9.32%	15.04	6.65%	15.43	6.48%	14.00	7.14%	1.15
Union Pacific	UNP	6.29	6.45%	6.55	6.72%	10.05	10.31%	16.25	6.15%	15.72	6.36%	15.00	6.67%	1.15
CSX Corp.	CSX	1.62	7.73%	1.70	8.11%	2.70	12.89%	13.01	7.69%	12.86	7.78%	15.00	6.67%	1.20
Norfolk Southern	NSC	5.12	7.23%	5.30	7.48%	8.15	11.50%	14.21	7.04%	13.68	7.31%	14.00	7.14%	1.10
Kansas City South'n	KSU	2.63	4.21%	2.81	4.50%	4.90	7.84%	24.94	4.01%	23.50	4.26%	28.00	3.57%	1.35
Can. Pacific Railway	CP	3.05	5.13%	3.25	5.47%	6.20	10.43%	20.94	4.78%	16.78	5.96%	15.00	6.67%	1.30
Genesee & Wyoming	GWR	2.49	4.39%	2.75	4.85%	4.35	7.67%	23.69	4.22%	21.23	4.71%	17.00	5.88%	1.25
RailAmerica Inc.	RA	0.75	5.41%	0.80	5.77%	1.80	12.99%	18.89	5.29%	17.71	5.65%			1.10

SUMS & AVERAGES - ALL

5.91% 6.18% 10.37% 5.73% 6.06% 6.25% 1.20

CLASS I SUMS & AVERAGES - ALL

6.25% 6.47% 10.38% 6.05% 6.36% 6.31% 1.21

CLASS I MEDIAN VALUE

6.59% 6.64% 10.37% 6.40% 6.42% 6.67% 1.18

CLASS III SUMS & AVERAGES - ALL

4.90% 5.31% 10.33% 4.76% 5.18% 5.88% 1.18

CLASS III MEDIAN VALUE

4.90% 5.31% 10.33% 4.76% 5.18% 5.88% 1.18

* All Negative values left out of calculations

Class I Industry Beta = 1.15

Class III Industry Beta = 1.20

Notes/Rational for Changes to Guidelines

Developed a new Class III Rate for T\

Added:

Genesee & Wyoming
RailAmerica Inc.

MONTANA DEPARTMENT OF REVENUE

Capital Asset Pricing Model
Industry: Railroads
2012 Assessment Year

$$K_E = R_F + \beta (R_M - R_F)$$

	Class I	Class III
--	---------	-----------

K _E = Cost of Equity	9.92%	11.42%
R _F = Risk Free Rate	2.89%	2.89%
β = Beta	1.15	1.20
R _M = Market Rate of Return	9.00%	10.00%
R _P = Equity Risk Premium (RM - RF)	6.11%	7.11%

R_m = Investor's Market Rate of Return

Ibbotson, SBBI, Large Company, Average Annual Return, *Arithmetic Average, Ex-Post
 Ibbotson, SBBI, Large Company, Average Annual Return, *Geometric Average, Ex-Post
 3 Stage Dividend Growth Model, S & P 500, See Exhibit, Ex Ante

R _M =	11.80%	11.80%
R _M =	9.80%	9.80%
R _M =	8.50%	8.50%

Mean = 10.03% 10.03%
 Median = 9.80% 9.80%

R_M= **9.00%** 10.00%

R_f = Risk Free Rate

Internal Revenue Service, Rev Rule 2011-31 Table 2 December 2011

Rev Rule 2011-31 Table 2

Annual Rates	Short Term - AFR	R _f = 0.45%
	Mid Term - AFR	R _f = 1.69%
	Long Term - AFR	R _f = 3.55%

The ValueLine Investment Survey

U.S. Treasury Securities January 6, 2012

3 Month	R _f = 0.01%
6 Month	R _f = 0.05%
1 Year	R _f = 0.10%

Federal Reserve Statistical Release

Treasury constant Maturities, 2011

Market yield on U.S. Treasury securities, Annual Averages

3-month constant maturity, quoted on investment basis	R _f = 0.02%
6-month constant maturity, quoted on investment basis	R _f = 0.06%
1-year constant maturity, quoted on investment basis	R _f = 0.12%

U.S. Treasury Securities Long-Term December 30, 2011

20 year constant maturity R_f = 2.57% Mean = 0.67%
 30 year constant maturity R_f = 2.89% Median = 0.10%

Weighted Mean = 0.86%

R_f= **2.89%**

MONTANA DEPARTMENT OF REVENUE

Dividend Growth Model
Industry: Railroads
2012 Assessment Year

$$K_E = D_1 / P_0 + G_A$$

K_E= Cost of Equity

D₁= Expected Dividends

P₀= Current Price Per Share

G= Sustainable Growth

CLASS I RAILROADS

Company Name	Ticker	Stock Price (P ₀)	Expected Dividend (D ₁)	Dividend Yield (D ₁ /P ₀)	Dividend Growth (G _A)	Ke 1 Year
Can. National Railway	CNI	74.57	1.42	1.90%	15.50%	17.40%
Can. Pacific Railway	CP	59.46	1.24	2.09%	10.50%	12.59%
CSX Corp.	CSX	20.95	0.56	2.67%	25.50%	28.17%
Kansas City South'n	KSU	62.49	Nil		Nil	
Norfolk Southern	NSC	70.86	1.80	2.54%	10.50%	13.04%
Union Pacific	UNP	97.53	2.40	2.46%	12.00%	14.46%

Weighted Mean= 17.11%

Median= 14.46%

Mean= 17.13%

Cost of Equity, (K_E) = 15.00%

CLASS III RAILROADS

Company Name	Ticker	Stock Price (P ₀)	Expected Dividend (D ₁)	Dividend Yield (D ₁ /P ₀)	Dividend Growth (G _A)	Ke 1 Year
Can. National Railway	GWR	56.71	Nil		Nil	
RailAmerica Inc.	RA	13.85	Nil		Nil	

Weighted Mean=

Median=

Mean=

Cost of Equity, (K_E) =

MONTANA DEPARTMENT OF REVENUE

Historical Stock Price Analysis From YAHOO Finance
Industry: Railroads
2012 Assessment Year

Ticker	Company														Yahoo			
			Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	4th Qtr Average	Annual Average	Yahoo P-E	EPS 1st 12 mo
CNI	Can. National Railway	high low	\$69.98 \$65.70	\$73.49 \$67.86	\$75.56 \$70.41	\$77.61 \$70.87	\$78.80 \$74.13	\$80.47 \$74.06	\$81.26 \$73.23	\$75.75 \$65.29	\$74.81 \$61.82	\$80.26 \$62.74	\$80.44 \$72.96	\$79.38 \$71.62	\$74.57	\$73.27	15.04	5.02
CP	Can. Pacific Railway	high low	\$69.92 \$63.88	\$69.07 \$65.64	\$68.12 \$61.97	\$66.48 \$61.57	\$66.99 \$60.34	\$63.21 \$58.13	\$64.78 \$60.61	\$64.61 \$54.20	\$58.06 \$44.74	\$66.20 \$44.98	\$62.54 \$55.31	\$68.12 \$59.62	\$59.46	\$61.63	20.94	3.05
CSX	CSX Corp. 3:1 Stock Split Jun 16	high low	\$23.82 \$21.58	\$25.00 \$23.02	\$26.81 \$23.97	\$26.63 \$24.03	\$26.50 \$24.48	\$26.45 \$24.08	\$27.06 \$23.75	\$24.96 \$19.94	\$22.19 \$17.69	\$23.14 \$17.83	\$22.60 \$19.99	\$22.29 \$19.87	\$20.95	\$23.24	13.01	1.62
GBX	Greenbrier Cos Inc.	high low	\$24.96 \$19.86	\$26.48 \$23.13	\$30.38 \$23.64	\$29.40 \$24.10	\$27.74 \$23.15	\$26.16 \$18.82	\$22.73 \$19.49	\$20.66 \$11.78	\$17.70 \$11.54	\$20.72 \$10.38	\$23.79 \$17.32	\$24.94 \$20.11	\$19.54	\$21.62	93.85	0.24
GWR	Genesee & Wyoming	high low	\$54.88 \$50.77	\$55.11 \$50.42	\$59.04 \$50.54	\$63.73 \$55.65	\$62.69 \$55.96	\$59.26 \$52.74	\$61.00 \$52.87	\$56.17 \$44.54	\$52.76 \$44.44	\$62.50 \$44.38	\$61.40 \$53.98	\$62.16 \$55.81	\$56.71	\$55.12	23.69	2.49
KSU	Kansas City South'n	high low	\$52.72 \$47.14	\$56.98 \$50.55	\$55.00 \$48.06	\$58.61 \$50.27	\$59.42 \$53.70	\$59.50 \$51.47	\$62.78 \$55.78	\$60.89 \$45.63	\$55.96 \$46.89	\$65.76 \$47.12	\$70.48 \$60.37	\$69.99 \$61.22	\$62.49	\$56.10	24.94	2.63
NSC	Norfolk Southern	high low	\$66.00 \$60.22	\$65.67 \$60.44	\$70.00 \$63.90	\$74.96 \$65.94	\$75.00 \$70.32	\$75.82 \$69.67	\$78.40 \$72.71	\$76.66 \$61.86	\$70.79 \$59.28	\$75.86 \$57.57	\$76.20 \$70.00	\$76.49 \$69.04	\$70.86	\$69.28	14.21	5.12
UNP	Union Pacific	high low	\$99.49 \$91.98	\$99.50 \$91.51	\$99.43 \$90.66	\$103.81 \$92.80	\$105.00 \$98.96	\$105.60 \$98.33	\$107.89 \$98.84	\$103.62 \$84.33	\$93.71 \$79.58	\$103.80 \$77.73	\$104.16 \$95.04	\$106.60 \$97.82	\$97.53	\$97.09	16.25	6.29
RA	RailAmerica Inc.	high low	\$13.57 \$12.38	\$15.14 \$11.97	\$17.17 \$14.85	\$17.34 \$16.30	\$17.18 \$14.65	\$15.69 \$13.66	\$15.77 \$14.42	\$15.09 \$11.06	\$13.92 \$11.56	\$14.92 \$12.43	\$14.57 \$12.87	\$15.10 \$13.23	\$13.85	\$14.37	18.89	0.75
PRRR	Pioneer Railcorp	high low	\$4.50 \$3.10	\$3.45 \$3.16	\$4.00 \$3.30	\$4.50 \$3.80	\$5.20 \$4.50	\$4.90 \$4.52	\$4.80 \$4.57	\$4.79 \$3.55	\$4.20 \$3.65	\$4.14 \$3.66	\$4.45 \$3.60	\$3.99 \$3.05	\$3.82	\$4.06	11.35	0.31
PWX	Providence & Worcester R F	high low	\$18.52 \$15.28	\$18.20 \$16.60	\$17.52 \$15.06	\$17.20 \$15.10	\$15.94 \$13.75	\$15.74 \$13.77	\$15.26 \$13.55	\$15.00 \$12.08	\$13.80 \$10.20	\$14.00 \$11.50	\$13.83 \$11.23	\$12.39 \$11.40	\$12.39	\$14.46	237.90	0.05

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Northern Pac.Ry	3.665585JP1	GenLn Mtg	01/01/2047	A	5.80				5.93	5.61	5.48	5.42	5.56	5.49	5.47	5.53	4.91	5.52%	5.30%
Northern Pac.Ry	3.665585KH7	Gen LnMtg-Stpd	01/01/2047	A	5.79	5.79	5.85	5.94	5.61	5.48	5.42	5.56	5.49	5.47	5.54	4.91	5.57%	5.31%	
Burlington Northern	8.75	121897WQ1	Deb	02/25/2022	BBB+	6.62	6.51	6.55	6.50	6.37	6.38	6.38	6.12	6.01	6.11	6.12	6.02	6.31%	6.08%
Burlington NorthernR.R.	3.8	121899CC0	Con Mtg L	01/01/2020	BBB+	4.11	4.80	4.10	4.05	3.98	4.01	3.91	3.80	3.75	3.75	3.72	3.67	3.97%	3.71%
Burlington NorthernR.R.	6.55	121899CD8	Con Mtg K	01/01/2020	BBB+	5.83	5.81	5.84	5.82	5.70	5.63	5.63	5.47	5.38	5.43	5.40	5.34	5.61%	5.39%
Burlington NorthernR.R.	6.55	121899CE6	Con Mtg O	01/01/2020	BBB+	5.83	5.81	5.84	5.82	5.70	5.63	5.63	5.47	5.38	5.43	5.40	5.34	5.61%	5.39%
Burlington NorthernR.R.	8.15	121899CF3	Con Mtg N	01/01/2020	BBB+	6.63	6.61	6.65	6.64	6.51	6.43	6.43	6.26	6.16	6.23	6.20	6.13	6.41%	6.19%
Burlington NorthernR.R.	8.15	121899CG1	Con Mtg P	01/01/2020	BBB+	6.64	6.62	6.65	6.64	6.51	6.44	6.44	6.27	6.17	6.23	6.20	6.14	6.41%	6.19%
Burlington NorthernR.R.	3.2	121899CH9	Con Mtg M	01/01/2045	BBB+	5.48	5.31	5.35	5.32	5.10	5.05	5.05	4.73	4.31	4.50	4.54	4.39	4.93%	4.48%
Burlington Northern Santa Fe Corp.	7.121897AA2	Deb	12/15/2025	BBB+		5.73	5.76										5.09	5.53%	5.09%
Burlington Northern Santa Fe Corp.	6.88	121897AB0	Deb	02/15/2016	BBB+		6.00	6.02									5.91	5.98%	5.91%
Burlington Northern Santa Fe Corp.	7.29	121897AD6	Deb	06/01/2036	BBB+		6.18	6.18									5.14	5.83%	5.14%
Burlington Northern Santa Fe Corp.	6.88	121897AG9	Deb	12/01/2027	BBB+		6.05	6.08									5.33	5.82%	5.33%
Burlington Northern Santa Fe Corp.	6.7	121897AJ3	Deb	08/01/2028	BBB+		6.05	6.02									5.25	5.77%	5.25%
Burlington Northern Santa Fe Corp.	7.08	121897AK0	Deb	05/13/2029	BBB+		6.14	6.11									5.36	5.87%	5.36%
Burlington Northern Santa Fe Corp.	8.12	121897AQ7	Deb	04/15/2020	BBB+	6.64	6.46	6.49	6.60	6.51	6.56	6.42	6.29	6.22	6.23	6.20	6.07	6.39%	6.17%
Burlington Northern Santa Fe Corp.	7.95	121897AR5	Deb	08/15/2030	BBB+		6.30	6.25									5.57	6.04%	5.57%
Burlington Northern Santa Fe Corp.	6.75	121897AT1	Nts	07/15/2011	BBB+		6.59	6.62										6.61%	
Burlington Northern Santa Fe Corp.	5.9	121897AU8	Nts	07/01/2012	BBB+		5.54	5.55									5.76	5.62%	5.76%
Burlington Northern Santa Fe Corp.	4.3	121897AV6	Nts	07/01/2013	BBB+		4.02	4.05									4.11	4.06%	4.11%
Burlington Northern Santa Fe Corp.	6.2	121897AX2	Deb	08/15/2036	BBB+		5.75	5.75									4.84	5.45%	4.84%
Burlington Northern Santa Fe Corp.	6.15	121897AZ7	Deb	05/01/2037	BBB+		5.68	5.69									4.86	5.41%	4.86%
Norfolk Southern Corp.	9.655844AA6	Nts	03/01/2021	BBB+	6.95	6.97	7.01	7.00	6.88	6.96	6.80	6.63	6.59	6.70	6.56	6.53	6.80%	6.60%	
Norfolk Southern Corp.	7.765584AE8	Nts	05/15/2017	BBB+	6.27	6.28	6.26	6.25	6.13	6.20	6.10	6.07	6.13	6.16	6.08	5.99	6.16%	6.08%	
Norfolk Southern Corp.	7.0565584AF5	Nts	05/01/2037	BBB+	5.88	5.79	5.82	5.83	5.63	5.81	5.54	5.36	5.20	5.35	5.05	5.03	5.52%	5.14%	
Norfolk Southern Corp.	7.865584AJ7	Nts	05/15/2027	BBB+	6.19	6.13	6.17	6.11	5.93	6.02	5.94	5.74	5.49	5.65	5.42	5.51	5.86%	5.53%	
Norfolk Southern Corp.	6.7565584AP3	Sr Nts	02/15/2011	BBB+	6.74												6.74%		
Norfolk Southern Corp.	7.2565584AQ1	Sr Nts	02/15/2031	BBB+	6.02	5.89	5.94	5.92	5.75	5.89	5.62	5.46	5.29	5.47	5.24	5.22	5.64%	5.31%	
Norfolk Southern Corp.	5.5965584AW8	Nts	05/17/2025	BBB+	5.45	5.23	5.21	5.19	5.11	5.17	5.02	4.89	4.86	4.89	4.81	4.83	5.06%	4.84%	
Norfolk Southern Corp.	5.6465584AX6	Nts	05/17/2029	BBB+	5.42	5.32	5.35	5.34	5.20	5.32	5.17	5.00	4.77	4.87	4.71	4.58	5.09%	4.72%	
Union Pacific Corp.	7.907818AZ1	Deb	02/01/2016	BBB+	5.92	5.95	5.98	5.95	5.88	5.90	5.80	5.77	5.80	5.84	5.81	5.81	5.87%	5.82%	
Union Pacific Corp.	7.12907818BY3	Deb	02/01/2028	BBB+	6.36	5.85	5.88	5.94	5.78	5.88	5.73	5.55	5.32	5.48	5.42	5.55	5.73%	5.48%	
Union Pacific Corp.	6.62907818CF3	Deb	02/01/2029	BBB+	5.99	5.68	5.74	5.72	5.58	5.73	5.43	5.35	5.12	5.30	5.23	5.04	5.49%	5.19%	
Union Pacific Corp.	6.12907818CN6	Nts	01/15/2012	BBB+	5.84	5.86	5.88	5.90	5.93	5.96	5.98	6.01	6.04	6.06	6.08	6.10	5.97%	6.08%	
Union Pacific Corp.	6.5907818CP1	Nts	04/15/2012	BBB+	6.11	6.14	6.14	6.16	6.20	6.23	6.25	6.29	6.32	6.34	6.35	6.37	6.24%	6.35%	
Union Pacific Corp.	5.38907818CT3	Nts	05/01/2014	BBB+	4.86	4.90	4.89	4.89	4.85	4.86	4.84	4.84	4.87	4.89	4.89	4.94	4.88%	4.91%	
Union Pacific Corp.	6.25907818CU0	Deb	05/01/2034	BBB+	5.78	5.84	5.70	5.70	5.56	5.67	5.43	5.40	4.98	5.11	4.99	4.98	5.43%	5.03%	
Union Pacific Corp.	4.88907818CV8	Sr Nt	1/15/2015	BBB+		4.50	4.50	4.48	4.43	4.45	4.40	4.40	4.44	4.44	4.44	4.44	4.45%	4.45%	
Union Pacific Corp.	5.65907818CW6	Nts	05/01/2017	BBB+	5.00	5.03	5.05	5.04	4.93	4.99	4.90	4.85	4.90	4.88	4.85	4.84	4.94%	4.86%	
Union Pacific Corp.	6.15907818CX4	Deb	05/01/2037	BBB+	5.74	5.64	5.66	5.75	5.52	5.62	5.40	5.26	5.06	5.12	4.96	4.93	5.39%	5.00%	
Union Pacific Corp.	5.45907818CY2	Nts	01/31/2013	BBB+	5.05	5.04	5.06	5.06	5.07	5.09	5.10	5.12	5.14	5.16	5.17	5.19	5.10%	5.17%	
Norfolk Southern Corp.	7.9907818D1	Nt	11/15/2097	BBB+	6.57	6.25	6.33	6.23	6.07	6.25	5.98	5.64	5.19	5.32	5.19	5.01	5.84%	5.17%	
CSX Corp.	8.62126408AM5	Deb	05/15/2022	BBB	6.92	6.76	6.79	6.76	6.62	6.68	6.50	6.30	6.23	6.31	6.25	6.20	6.53%	6.25%	
CSX Corp.	6.75126408AP8	Nts	03/15/2011	BBB	6.70	6.74											6.72%		
CSX Corp.	8.1126408AQ6	Deb	09/15/2022	BBB	6.55	6.58	6.55	6.40	6.47	6.29	6.09	6.01	6.09	6.03	5.98	6.30%	6.03%		
CSX Corp.	6.3126408GB3	Nts	03/15/2012	BBB	5.96	5.99	6.00	6.04	6.06	6.09	6.12	6.16	6.17	6.20	6.23	6.08%	6.20%		
CSX Corp.	5.3126408GF4	Nts	02/15/2014	BBB	4.87	4.90	4.92	4.91	4.81	4.83	4.83	4.82	4.86	4.86	4.88	4.89	4.87%	4.88%	
CSX Corp.	6.126408GH0	Nts	10/01/2036	BBB	5.83	5.71	5.78	5.76	5.58	5.70	5.45	5.31	4.95	5.07	4.96	5.09	5.43%	5.04%	
CSX Corp.	5.6126408GJ6	Nts	05/01/2017	BBB	5.06	5.05	5.06	5.04	4.95	5.01	4.91	4.88	4.91	4.93	4.90	4.89	4.97%	4.91%	
CSX Corp.	6.15126408GK3	Nts	05/01/2037	BBB	5.81	5.74	5.81	5.79	5.62	5.74	5.47	5.35	5.00	5.10	5.06	5.11	5.47%	5.09%	
Csx Corp MTN BE	6.812641LBU6	MTN Ser C	12/1/2028	BBB	6.10	6.01	6.07	6.05	5.90	6.00	5.80	5.65	5.35	5.42	5.52	5.44	5.78%	5.46%	
Consolidated Rail	9.75209864AT4	Deb	06/15/2020	NR	7.20	7.11	7.15	7.17	6.97	6.89	6.89	6.76	6.65	6.77	6.74	7.12	6.95%	6.88%	

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
2012 Assessment Year

STANDARD & POOR'S BOND GUIDE
CURRENT YIELD

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Kansas City Southern	7	485170AF1	Deb	12/15/2025	NR	6.92	6.94	6.96	6.93						6.34	6.14	6.18	6.63%	6.22%
Missouri Pacific RR.	4.75	606198LF4	GenIncA	01/01/2020	NR	5.00		5.13	4.84								5.10	5.02%	5.10%
Missouri Pacific RR.	4.75	606198LG2	GenIncB	01/01/2030	NR	5.36		5.45	5.32								5.08	5.30%	5.08%
Missouri Pacific RR.	5	606198LH0	IncDeb	01/01/2045	NR	7.69		6.68	7.24								6.94	7.14%	6.94%
Counts of data					43	51	53	42	38	38	38	38	38	39	39	39	53	56	53

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
A's	5.55%	5.31%
BBB's	5.67%	5.36%
NR's	6.21%	6.04%
ALL	5.72%	5.42%
BBB- & Above	5.67%	5.35%
BB- & Above	5.67%	5.35%

**Investment Grade (BBB- & Above)*

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
2011 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR	
Northern Pac.Ry	3.665585JP1	GenLn Mtg		01/01/2047	A	6.49		6.56	6.64	6.30	6.15	6.12	6.27	6.27	6.17	6.25	5.53	6.25%	5.98%	
Northern Pac.Ry	3.665585KH7	Gen LnMtg-Stpd		01/01/2047	A	6.47	6.48	6.54	6.64	6.30	6.15	6.12	6.27	6.27	6.17	6.25	5.53	6.27%	5.98%	
Burlington Northern	8.75121897WQ1	Deb		02/25/2022	BBB+	4.95	4.71	4.76	4.64	4.37	4.37	4.37	3.76	3.49	3.54	3.56	3.42	4.16%	3.51%	
Burlington NorthernR.R.	3.8121899CC0	Con Mtg L		01/01/2020	BBB+	4.84	4.77	4.83	4.66	4.42	4.51	4.22	3.81	3.81	3.61	3.51	3.31	4.19%	3.48%	
Burlington NorthernR.R.	6.55121899CD8	Con Mtg K		01/01/2020	BBB+	4.84	4.77	4.83	4.78	4.45	4.26	4.26	3.78	3.49	3.55	3.46	3.31	4.15%	3.44%	
Burlington NorthernR.R.	6.55121899CE6	Con Mtg O		01/01/2020	BBB+	4.84	4.77	4.83	4.78	4.45	4.26	4.26	3.78	3.49	3.55	3.46	3.31	4.15%	3.44%	
Burlington NorthernR.R.	8.15121899CF3	Con Mtg N		01/01/2020	BBB+	4.95	4.89	4.94	4.90	4.57	4.37	4.37	3.89	3.61	3.66	3.56	3.43	4.26%	3.55%	
Burlington NorthernR.R.	8.15121899CG1	Con Mtg P		01/01/2020	BBB+	4.97	4.90	4.96	4.91	4.58	4.39	4.39	3.91	3.62	3.66	3.56	3.44	4.27%	3.55%	
Burlington NorthernR.R.	3.2121899CH9	Con Mtg M		01/01/2045	BBB+	6.13		5.94	5.99	5.96	5.71	5.65	5.65	5.27	4.75	5.00	5.05	4.86	5.50%	4.97%
Burlington Northern Santa Fe Corp.	712189TAA2	Deb		12/15/2025	BBB+		4.89	4.93									3.57	4.46%	3.57%	
Burlington Northern Santa Fe Corp.	6.8812189TAB0	Deb		02/15/2016	BBB+		3.64	3.70									2.67	3.34%	2.67%	
Burlington Northern Santa Fe Corp.	7.2912189TAD6	Deb		06/01/2036	BBB+		5.92	5.91									4.46	5.43%	4.46%	
Burlington Northern Santa Fe Corp.	6.8812189TAG9	Deb		12/01/2027	BBB+		5.61	5.66									4.34	5.20%	4.34%	
Burlington Northern Santa Fe Corp.	6.712189TAJ3	Deb		08/01/2028	BBB+		5.72	5.67									4.35	5.25%	4.35%	
Burlington Northern Santa Fe Corp.	7.0812189TAK0	Deb		05/13/2029	BBB+		5.72	5.66									5.69%			
Burlington Northern Santa Fe Corp.	8.1212189TAQ7	Deb		04/15/2020	BBB+		4.63	4.69									3.42	4.25%	3.42%	
Burlington Northern Santa Fe Corp.	7.9512189TAR5	Deb		08/15/2030	BBB+		5.71	5.64									4.53	5.29%	4.53%	
Burlington Northern Santa Fe Corp.	6.7512189TAT1	Nts		07/15/2011	BBB+		0.42	0.17										0.30%		
Burlington Northern Santa Fe Corp.	5.912189TAU8	Nts		07/01/2012	BBB+		1.04	0.88										1.37	1.10%	1.37%
Burlington Northern Santa Fe Corp.	4.312189TAV6	Nts		07/01/2013	BBB+		1.29	1.55										1.23	1.36%	1.23%
Burlington Northern Santa Fe Corp.	6.212189TAX2	Deb		08/15/2036	BBB+		5.62	5.61									4.34	5.19%	4.34%	
Burlington Northern Santa Fe Corp.	6.1512189TAZ7	Deb		05/01/2037	BBB+		5.55	5.56									4.41	5.17%	4.41%	
Norfolk Southern Corp.	9655844AA6	Nts		03/01/2021	BBB+	5.21	5.24	5.30	5.26	5.00	5.17	4.83	4.49	4.49	4.47	4.13	4.04	4.80%	4.21%	
Norfolk Southern Corp.	7.7655844AE8	Nts		05/15/2017	BBB+	3.62	3.62	3.51	3.42	2.98	3.20	2.88	2.77	2.77	2.83	2.48	2.09	3.01%	2.47%	
Norfolk Southern Corp.	7.05655844AF5	Nts		05/01/2037	BBB+	5.60	5.48	5.51	5.53	5.25	5.49	5.12	4.88	4.88	4.86	4.44	4.40	5.12%	4.57%	
Norfolk Southern Corp.	7.8655844AJ7	Nts		05/15/2027	BBB+	5.39	5.28	5.34	5.23	4.90	5.05	4.93	4.59	4.59	4.40	3.97	4.12	4.82%	4.16%	
Norfolk Southern Corp.	7.25655844AQ1	Sr Nts		02/15/2031	BBB+	5.55	5.36	5.42	5.39	5.15	5.34	4.93	4.64	4.64	4.67	4.30	4.26	4.97%	4.41%	
Norfolk Southern Corp.	5.59655844AW8	Nts		05/17/2025	BBB+	5.33	4.91	4.87	4.83	4.66	4.78	4.49	4.22	4.22	4.20	4.02	4.07	4.55%	4.10%	
Norfolk Southern Corp.	5.64655844AX6	Nts		05/17/2029	BBB+	5.30	5.14	5.17	5.15	4.93	5.12	4.86	4.59	4.59	4.34	4.05	3.81	4.75%	4.07%	
Union Pacific Corp.	7907818AZ1	Deb		02/01/2016	BBB+	3.07	3.14	3.19	3.00	2.83	2.93	2.56	1.49	1.49	2.10	1.90	1.81	2.46%	1.94%	
Union Pacific Corp.	7.12907818BY3	Deb		02/01/2028	BBB+	5.99	5.18	5.23	5.32	5.03	5.22	5.73	4.59	4.59	4.51	4.39	4.61	5.03%	4.50%	
Union Pacific Corp.	6.62907818CF3	Deb		02/01/2029	BBB+	5.68	5.20	5.28	5.25	5.03	5.25	5.00	4.59	4.59	4.52	4.41	4.06	4.91%	4.33%	
Union Pacific Corp.	6.12907818CN6	Nts		01/15/2012	BBB+	1.01	1.02	0.88	0.80	2.73	3.23	3.65				1.24	0.62		1.69%	0.93%
Union Pacific Corp.	6.5907818CP1	Nts		04/15/2012	BBB+	1.20	1.31	0.87	0.86	1.52	2.04	2.48	3.06	3.06	1.21	0.55			1.65%	0.88%
Union Pacific Corp.	5.38907818CT3	Nts		05/01/2014	BBB+	2.01	2.23	2.10	2.02	1.66	1.74	1.60	1.58	1.58	1.36	1.27	1.57		1.73%	1.40%
Union Pacific Corp.	6.25907818CU0	Deb		05/01/2034	BBB+	5.62	5.70	5.51	5.51	5.29	5.47	5.12	5.07	5.07	4.64	4.47	4.44	5.16%	4.52%	
Union Pacific Corp.	4.88907818CV8	Sr Nt		1/15/2015	BBB+		2.63	2.66	2.38	2.24	2.32	2.06	1.22	1.22	1.90	1.70	1.60	1.99%	1.73%	
Union Pacific Corp.	5.65907818CW6	Nts		05/01/2017	BBB+	3.33	3.44	3.49	3.40	2.95	3.20	2.83	2.66	2.66	2.60	2.40	2.30	2.94%	2.43%	
Union Pacific Corp.	6.15907818CX4	Deb		05/01/2037	BBB+	5.62	5.49	5.52	5.64	5.32	5.47	5.17	4.98	4.98	4.77	4.56	4.51	5.17%	4.61%	
Union Pacific Corp.	5.45907818CY2	Nts		01/31/2013	BBB+	1.48	1.26	1.27	1.12	1.65	1.87	1.96	0.02	0.02	0.97	0.92	0.90	1.12%	0.93%	
Norfolk Southern Corp.	7.9Nt	Nt		11/15/2097	BBB+	6.56	6.25	6.32	6.22	6.05	6.25	5.98	5.61	5.61	5.29	5.17	4.98	5.86%	5.15%	
CSX Corp.	8.62126408AM5	Deb		05/15/2022	BBB	5.66	5.33	5.38	5.30	4.98	5.10	4.75	4.34	4.34	4.27	4.13	3.99	4.80%	4.13%	
CSX Corp.	6.75126408AP8	Nts		03/15/2011	BBB	1.07													1.07%	
CSX Corp.	8.1126408AQ6	Deb		09/15/2022	BBB	5.34	5.34	5.38	5.31	4.93	5.05	4.68	4.27	4.27	4.28	4.14	4.00	4.75%	4.14%	
CSX Corp.	6.3126408GB3	Nts		03/15/2012	BBB	1.21	1.32	0.84	0.76	1.84	2.30	2.74	3.35	3.35	1.12	1.32	1.47	1.80%	1.30%	
CSX Corp.	5.3126408GF4	Nts		02/15/2014	BBB	2.28	2.45	2.52	2.40	1.82	1.94	1.95	0.35	0.35	1.34	1.40	1.37	1.68%	1.37%	
CSX Corp.	6126408GH0	Nts		10/01/2036	BBB	5.79	5.63	5.72	5.68	5.44	5.61	5.27	5.07	5.07	4.73	4.58	4.76	5.28%	4.69%	
CSX Corp.	5.6126408GJ6	Nts		05/01/2017	BBB	3.68	3.64	3.65	3.56	3.17	3.39	3.00	2.88	2.88	2.94	2.75	2.69	3.19%	2.79%	
CSX Corp.	6.15126408GK3	Nts		05/01/2037	BBB	5.72	5.63	5.71	5.68	5.47	5.64	5.27	5.10	5.10	4.75	4.70	5.29%	4.74%		

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
2011 Assessment Year

STANDARD & POOR'S BOND GUIDE
BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Csx Corp MTN BE	6.8	12641LBU6	MTN Ser C	12/1/2028	BBB	5.77	5.63	5.72	5.68	5.32	5.56	5.25	5.00	5.00	4.61	4.78	4.66	5.25%	4.68%
Consolidated Rail	9.75	209864AT4	Deb	06/15/2020	NR	4.98	4.76	4.82	4.84	4.37	4.17	4.17	3.79	3.50	3.85	3.81	4.47	4.29%	4.04%
Kansas City Southern	7	485170AF1	Deb	12/15/2025	NR	6.88	6.91	6.94	6.89						5.90	5.56	5.62	6.39%	5.69%

Counts of data

38 50 51 38 37 37 37 36 36 38 38 38 47 52 49

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
A's	6.26%	5.98%
BBB's	3.91%	3.42%
NR's	5.34%	4.87%
ALL	4.05%	3.58%
BBB+ & Above	4.07%	3.54%
BBB & Above	4.00%	3.53%

*Investment Grade (BBB- & Above)

MONTANA DEPARTMENT OF REVENUE

Support for Debt Rating
Industry: Railroads
2011 Assessment Year

STANDARD & POOR'S BOND GUIDE
20 YR PLUS - BOND YIELD TO MATURITY

Company Name	Coupon	CUSIP	Issue	Maturity Date	S&P Bond Rating	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Avg Full Year	Avg 4th QTR
Northern Pac.Ry	3	665585JP1	GenLn Mtg	01/01/2047	A	6.49		6.56	6.64	6.30	6.15	6.12	6.27	6.27	6.17	6.25	5.53	6.25%	5.98%
Northern Pac.Ry	3	665585KH7	Gen LnMtg-Stpd	01/01/2047	A	6.47	6.48	6.54	6.64	6.30	6.15	6.12	6.27	6.27	6.17	6.25	5.53	6.27%	5.98%
Burlington NorthernR.R.	3.2	121899CH9	Con Mtg M	01/01/2045	BBB+	6.13	5.94	5.99	5.96	5.71	5.65	5.65	5.27	4.75	5.00	5.05	4.86	5.50%	4.97%
Burlington Northern Santa Fe Corp.	7.29	12189TAD6	Deb	06/01/2036	BBB+		5.92	5.91									4.46	5.43%	4.46%
Burlington Northern Santa Fe Corp.	6.2	12189TAX2	Deb	08/15/2036	BBB+		5.62	5.61									4.34	5.19%	4.34%
Burlington Northern Santa Fe Corp.	6.15	12189TAZ7	Deb	05/01/2037	BBB+		5.55	5.56									4.41	5.17%	4.41%
Norfolk Southern Corp.	7.05	655844AF5	Nts	05/01/2037	BBB+	5.60	5.48	5.51	5.53	5.25	5.49	5.12	4.88	4.88	4.86	4.44	4.40	5.12%	4.57%
Norfolk Southern Corp.	7.25	655844AQ1	Sr Nts	02/15/2031	BBB+	5.55	5.36	5.42	5.39	5.15	5.34	4.93	4.64	4.64	4.67	4.30	4.26	4.97%	4.41%
Union Pacific Corp.	6.25	907818CU0	Deb	05/01/2034	BBB+	5.62	5.70	5.51	5.51	5.29	5.47	5.12	5.07	5.07	4.64	4.47	4.44	5.16%	4.52%
Union Pacific Corp.	6.15	907818CX4	Deb	05/01/2037	BBB+	5.62	5.49	5.52	5.64	5.32	5.47	5.17	4.98	4.98	4.77	4.56	4.51	5.17%	4.61%
Norfolk Southern Corp.	7.9		Nt	11/15/2097	BBB+	6.56	6.25	6.32	6.22	6.05	6.25	5.98	5.61	5.61	5.29	5.17	4.98	5.86%	5.15%
CSX Corp.	6	126408GH0	Nts	10/01/2036	BBB	5.79	5.63	5.72	5.68	5.44	5.61	5.27	5.07	5.07	4.73	4.58	4.76	5.28%	4.69%
CSX Corp.	6.15	126408GK3	Nts	05/01/2037	BBB	5.72	5.63	5.71	5.68	5.47	5.64	5.27	5.10	5.10	4.75	4.70	4.76	5.29%	4.74%

Counts of data

10 12 13 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 13 13 13

NOTES:

Data downloaded from the S&P website and missing data supplemented from month end Bond Guides when available.

means the data was not available in S&P Guide

means issuance matured or called

	Annual	4th Qtr
A's	6.26%	5.98%
BBB+'s	5.29%	4.60%
BBB's	5.29%	4.71%
ALL	5.44%	4.83%
BBB+ & Above	5.46%	4.85%
BBB & Above	5.44%	4.83%

"Investment Grade (BBB- & Above)



Montana Department of
REVENUE

2012 Capitalization Rate Study

Appendix and Supporting Documents

Table Showing The Implied Risk Premium Using Macroeconomic Data
 This type of calculation can also be found in Chapter 9 of Ibbotson's (MorningStar) SBBI, Supply Side Model

3 Stage Dividend Growth Model

Assumptions:

Stages	Years	Growth	Model 1
1st Stage	1-5 years	Constant @:	13.50%
2nd Stage	6-15 years	Linear from:	12.70% to 4.73%
			Real Growth
3rd Stage	15 years -perpetuity	GDP Growth: Real and Inflation	2.20% 2.70%
		GDP Growth*: Real + Inflation	4.73%

Model 2	
	11.80%
OR	10.92% to 4.17%
	Inflation
+	1.97% to 2.03%
TO	4.17%

S & P GICS Composite 1500 Valuations as of 12/30/11 Monthly Investment Review, January 2012
 Linear from 1st Stage to 3rd Stage

*GDP Growth = Real growth + Inflation
 First Quarter 2011 Survey Of Professional Forecasters - Philadelphia Federal Reserve Release Date 2/10/2012

Model 1

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Starting Industry	Start Price	Expected Dividends	1st Stage Growth Rates					2nd Stage Growth Rates												
S & P 500	\$ (1,257.60)	\$ 26.75	\$ 30.36	\$ 34.46	\$ 39.11	\$ 44.39	\$ 50.39	\$ 56.79	\$ 63.55	\$ 70.60	\$ 77.88	\$ 85.29	\$ 92.73	\$ 100.07	\$ 107.20	\$ 113.98	\$ 120.28	\$ 125.97	\$ 131.93	\$ 138.17
Implied Market Return =																				

Model 2

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Starting Industry	Start Price	Expected Dividends	1st Stage Growth Rates					2nd Stage Growth Rates												
S & P 500	\$ (1,257.60)	\$ 26.75	\$ 29.85	\$ 33.32	\$ 37.18	\$ 41.49	\$ 46.31	\$ 51.37	\$ 56.63	\$ 62.05	\$ 67.57	\$ 73.13	\$ 78.65	\$ 84.05	\$ 89.26	\$ 94.19	\$ 98.75	\$ 102.87	\$ 107.16	\$ 111.63
Implied Market Return =																				

Conclusions:

Implied Market Rate Range = 7.92% to 8.86%

Mean 8.39%

Median 8.39%

Market Rate Used 8.50%

2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%
\$144.70	\$151.55	\$158.71	\$166.22	\$174.08	\$182.32	\$190.94	\$199.97	\$209.43	\$219.34	\$229.71	\$240.58	\$251.96	\$263.88	\$276.36	\$289.43	\$303.12	\$317.46	\$332.47	\$348.20	\$364.67	\$381.92	\$399.98	\$418.90

2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%
\$116.28	\$121.13	\$126.19	\$131.45	\$136.93	\$142.64	\$148.59	\$154.78	\$161.24	\$167.96	\$174.96	\$182.26	\$189.86	\$197.78	\$206.03	\$214.62	\$223.57	\$232.89	\$242.60	\$252.72	\$263.26	\$274.23	\$285.67	\$297.58

2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074
4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	
\$438.71	\$ 459.47	\$ 481.20	\$ 503.96	\$ 527.80	\$ 552.76	\$ 578.91	\$ 606.29	\$ 634.97	\$ 665.00	\$ 696.45	\$ 729.40	\$ 763.90	\$ 800.03	\$ 837.87	\$ 877.50	\$ 919.01	\$ 962.48	\$ 1,008.00	\$ 1,055.68
4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	
\$309.99	\$ 322.92	\$ 336.38	\$ 350.41	\$ 365.02	\$ 380.24	\$ 396.10	\$ 412.62	\$ 429.82	\$ 447.75	\$ 466.42	\$ 485.87	\$ 508.13	\$ 527.23	\$ 549.22	\$ 572.12	\$ 595.98	\$ 620.83	\$ 646.72	\$ 673.69

2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094
3rd Stage Growth Rates																			
4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	
\$ 1,105.61	\$ 1,157.91	\$ 1,212.68	\$ 1,270.04	\$ 1,330.11	\$ 1,393.03	\$ 1,458.92	\$ 1,527.92	\$ 1,600.19	\$ 1,675.88	\$ 1,755.15	\$ 1,838.17	\$ 1,925.12	\$ 2,016.17	\$ 2,111.54	\$ 2,211.42	\$ 2,316.02	\$ 2,425.56	\$ 2,540.29	\$ 2,660.45

2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094
3rd Stage Growth Rates																			
4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	
\$ 701.78	\$ 731.04	\$ 761.53	\$ 793.28	\$ 826.36	\$ 860.82	\$ 896.72	\$ 934.11	\$ 973.07	\$ 1,013.64	\$ 1,055.91	\$ 1,099.94	\$ 1,145.81	\$ 1,193.59	\$ 1,243.36	\$ 1,295.21	\$ 1,349.22	\$ 1,405.48	\$ 1,464.09	\$ 1,525.15

2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112
4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	
\$ 2,786.29	\$ 2,918.08	\$ 3,056.10	\$ 3,200.66	\$ 3,352.05	\$ 3,510.60	\$ 3,676.65	\$ 3,850.56	\$ 4,032.69	\$ 4,223.44	\$ 4,423.20	\$ 4,632.42	\$ 4,851.53	\$ 5,081.01	\$ 5,321.34	\$ 5,573.04	\$ 5,836.65	\$ 6,112.72

2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112
4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	
\$ 1,588.74	\$ 1,655.00	\$ 1,724.01	\$ 1,795.90	\$ 1,870.79	\$ 1,948.80	\$ 2,030.07	\$ 2,114.72	\$ 2,202.90	\$ 2,294.76	\$ 2,390.46	\$ 2,490.14	\$ 2,593.98	\$ 2,702.15	\$ 2,814.83	\$ 2,932.20	\$ 3,054.48	\$ 3,181.85

2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128
4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%	4.730%
\$ 6,401.85	\$ 6,704.66	\$ 7,021.79	\$ 7,353.92	\$ 7,701.76	\$ 8,066.06	\$ 8,447.58	\$ 8,847.15	\$ 9,265.62	\$ 9,703.89	\$ 10,162.88	\$ 10,643.58	\$ 11,147.03	\$ 11,674.28	\$ 12,226.47	\$ 12,804.79

2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128
4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%	4.170%
\$ 3,314.53	\$ 3,452.75	\$ 3,596.73	\$ 3,746.71	\$ 3,902.95	\$ 4,065.70	\$ 4,235.24	\$ 4,411.85	\$ 4,595.82	\$ 4,787.47	\$ 4,987.11	\$ 5,195.07	\$ 5,411.70	\$ 5,637.37	\$ 5,872.45	\$ 6,117.33

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H.15 Selected Interest Rates for Feb 02, 2012

Series Description	Market yield on U.S. Treasury securities at 1-year constant	Market yield on U.S. Treasury securities at 5-year constant	Market yield on U.S. Treasury securities at 5-year constant	Market yield on U.S. Treasury securities at 10-year constant	Market yield on U.S. Treasury securities at 10-year constant	Market yield on U.S. Treasury securities at 20-year constant	Market yield on U.S. Treasury securities at 20-year constant	Market yield on U.S. Treasury securities at 20-year constant
	Percent: _F	Percent: _F	Percent: _F	Percent: _F	Percent: _F	Percent: _Per_Year	Percent: _Per_Year	Percent: _Per_Year
Unit:	1	1	1	1	1	1	1	1
Multiplier:	NA	NA	NA	NA	NA	NA	NA	NA
Currency:	H15/H15/F	H15/H15/F	H15/H15/F	H15/H15/F	H15/H15/F	H15/H15/RIFLGFCY10_XI_RIFLGFCY20_N	H15/H15/RIFLGFCY20_N.WF	H15/H15/RIFLGFCY20 XII_N.WF
Unique Identifier:	H15/H15/F H15/H15/F H15/H15/F H15/H15/F H15/H15/F RIFLGFCY10 XI RIFLGFCY20 N RIFLGFCY20 XII N.WF							
Time Period						Inflation on 10 year	Inflation on 20 year	Used in 3 stage growth Model
2011-09-16	0.1	0.91	-0.74	2.03	0.09	2.92	0.72	1.94
2011-09-23	0.1	0.85	-0.73	1.87	0.05	2.68	0.66	1.82
2011-09-30	0.11	0.96	-0.57	1.97	0.15	2.74	0.73	1.82
2011-10-07	0.11	0.96	-0.57	1.93	0.11	2.63	0.62	1.82
2011-10-14	0.11	1.14	-0.51	2.22	0.26	2.92	0.8	1.96
2011-10-21	0.12	1.07	-0.64	2.2	0.23	2.92	0.77	1.97
2011-10-28	0.12	1.11	-0.74	2.28	0.19	3.02	0.74	2.09
2011-11-04	0.12	0.91	-0.98	2.07	-0.02	2.8	0.52	2.09
2011-11-11	0.1	0.9	-1	2.05	-0.05	2.79	0.51	2.1
2011-11-18	0.11	0.91	-0.79	2.02	0.04	2.73	0.59	1.98
2011-11-25	0.12	0.91	-0.7	1.94	0.04	2.6	0.58	1.9
2011-12-02	0.13	0.94	-0.79	2.04	0.02	2.72	0.57	2.02
2011-12-09	0.11	0.9	-0.82	2.04	0.01	2.74	0.63	2.03
2011-12-16	0.11	0.85	-0.77	1.94	-0.03	2.63	0.55	1.97
2011-12-23	0.12	0.9	-0.78	1.95	-0.08	2.63	0.51	2.03
2011-12-30	0.12	0.9	-0.73	1.94	-0.05	2.62	0.54	1.99
2012-01-06	0.12	0.88	-0.83	1.99	-0.08	2.71	0.52	2.07
2012-01-13	0.11	0.83	-0.86	1.95	-0.11	2.66	0.49	2.06
2012-01-20	0.11	0.85	-0.89	1.96	-0.08	2.68	0.52	2.04
2012-01-27	0.12	0.84	-0.99	2.01	-0.09	2.77	0.56	2.1

Average of 10 & 20 year
2.049375

ASWATH DAMODARAN'S 2011 WACC											
				For Tax Year 2012							
Industry Name	Number of Firms	Beta	Cost of Equity	E/(D+E)	Std Dev in Stock	Cost of Debt	Tax Rate	After-tax Cost of Debt	D/(D+E)	Pre-Tax Cost of Capital	Cost of Capital
Advertising	31	2.02	14.09%	69.80%	101.29%	4.87%	10.73%	4.35%	30.20%	11.30%	11.15%
Aerospace/Defense	64	1.10	8.49%	79.58%	61.32%	3.37%	20.72%	2.67%	20.42%	7.44%	7.30%
Air Transport	36	1.21	9.21%	80.44%	64.80%	3.37%	20.54%	2.68%	19.56%	8.07%	7.93%
Apparel	57	1.30	9.71%	84.47%	88.82%	4.37%	16.08%	3.67%	15.53%	8.88%	8.77%
Auto Parts	51	1.70	12.13%	78.34%	80.58%	4.37%	18.99%	3.54%	21.66%	10.45%	10.27%
Automotive	12	1.59	11.47%	42.63%	68.91%	3.87%	24.07%	2.94%	57.37%	7.11%	6.57%
Bank	426	0.77	6.52%	39.05%	61.15%	3.37%	15.97%	2.83%	60.95%	4.60%	4.27%
Bank (Midwest)	45	0.93	7.50%	62.69%	55.60%	3.37%	17.77%	2.77%	37.31%	5.96%	5.74%
Beverage	34	0.88	7.20%	79.04%	66.05%	3.87%	19.14%	3.13%	20.96%	6.50%	6.35%
Biotechnology	158	1.03	8.09%	88.12%	113.11%	4.87%	2.49%	4.75%	11.88%	7.71%	7.69%
Building Materials	45	1.50	10.96%	51.46%	78.83%	3.87%	11.17%	3.44%	48.54%	7.52%	7.31%
Cable TV	21	1.37	10.15%	59.50%	50.77%	3.37%	27.35%	2.45%	40.50%	7.40%	7.03%
Chemical (Basic)	16	1.36	10.08%	78.53%	49.27%	2.87%	20.90%	2.27%	21.47%	8.54%	8.41%
Chemical (Diversified)	31	1.51	11.02%	81.72%	56.31%	3.37%	21.73%	2.64%	18.28%	9.62%	9.48%
Chemical (Specialty)	70	1.28	9.57%	82.54%	71.60%	3.87%	17.58%	3.19%	17.46%	8.58%	8.46%
Coal	20	1.53	11.08%	77.58%	55.52%	3.37%	12.75%	2.94%	22.42%	9.35%	9.26%
Computer Software	184	1.04	8.17%	93.03%	82.03%	4.37%	12.27%	3.83%	6.97%	7.91%	7.87%
Computers/Peripherals	87	1.30	9.71%	90.72%	97.69%	4.87%	11.77%	4.30%	9.28%	9.26%	9.21%
Diversified Co.	107	1.14	8.76%	49.45%	75.00%	3.87%	15.55%	3.27%	50.55%	6.29%	5.98%
Drug	279	1.12	8.63%	86.61%	103.44%	4.87%	5.36%	4.61%	13.39%	8.13%	8.10%
E-Commerce	57	1.03	8.08%	93.98%	88.13%	4.37%	12.33%	3.83%	6.02%	7.86%	7.83%
Educational Services	34	0.83	6.91%	89.03%	78.24%	3.87%	25.17%	2.90%	10.97%	6.58%	6.47%
Electric Util. (Central)	21	0.75	6.41%	53.72%	23.37%	2.37%	31.82%	1.62%	46.28%	4.54%	4.19%
Electric Utility (East)	21	0.70	6.08%	60.18%	18.30%	2.37%	33.14%	1.58%	39.82%	4.61%	4.29%
Electric Utility (West)	14	0.75	6.40%	54.19%	19.85%	2.37%	31.30%	1.63%	45.81%	4.55%	4.21%
Electrical Equipment	68	1.33	9.89%	88.76%	67.76%	3.87%	17.02%	3.21%	11.24%	9.21%	9.14%
Electronics	139	1.07	8.31%	81.75%	89.93%	4.37%	10.36%	3.92%	18.25%	7.59%	7.51%
Engineering & Const	25	1.22	9.26%	89.29%	65.03%	3.87%	26.26%	2.85%	10.71%	8.68%	8.57%
Entertainment	77	1.63	11.72%	70.93%	108.37%	4.87%	15.38%	4.12%	29.07%	9.73%	9.51%
Entertainment Tech	40	1.23	9.32%	91.11%	76.91%	3.87%	11.59%	3.42%	8.89%	8.83%	8.79%
Environmental	82	0.81	6.73%	69.59%	92.14%	4.87%	11.71%	4.30%	30.41%	6.17%	5.99%
Financial Svcs. (Div.)	225	1.31	9.76%	28.45%	82.27%	4.37%	19.18%	3.53%	71.55%	5.90%	5.30%
Food Processing	112	0.91	7.39%	77.20%	60.68%	3.37%	20.00%	2.70%	22.80%	6.47%	6.32%
Foreign Electronics	9	1.09	8.47%	70.38%	35.40%	2.87%	35.12%	1.86%	29.62%	6.81%	6.51%
Funeral Services	6	1.14	8.73%	63.86%	39.35%	2.87%	30.84%	1.98%	36.14%	6.61%	6.29%
Furn/Home Furnishings	35	1.81	12.81%	80.39%	80.90%	4.37%	20.43%	3.48%	19.61%	11.16%	10.98%
Healthcare Information	25	1.17	8.95%	94.03%	65.79%	3.87%	22.19%	3.01%	5.97%	8.65%	8.60%
Heavy Truck & Equip	21	1.80	12.76%	69.61%	69.92%	3.87%	20.62%	3.07%	30.39%	10.06%	9.82%
Homebuilding	23	1.45	10.62%	49.93%	70.00%	3.87%	5.12%	3.67%	50.07%	7.24%	7.14%
Hotel/Gaming	51	1.74	12.37%	65.76%	79.09%	3.87%	14.53%	3.31%	34.24%	9.46%	9.26%
Household Products	26	1.07	8.32%	84.04%	62.24%	3.37%	25.12%	2.52%	15.96%	7.53%	7.40%
Human Resources	23	1.24	9.34%	90.65%	78.27%	3.87%	25.35%	2.89%	9.35%	8.82%	8.73%
Industrial Services	137	0.93	7.51%	75.35%	74.43%	3.87%	19.03%	3.13%	24.65%	6.62%	6.43%
Information Services	27	1.07	8.35%	76.80%	48.10%	2.87%	18.93%	2.33%	23.20%	7.08%	6.95%
Insurance (Life)	30	1.58	11.43%	60.92%	53.35%	3.37%	28.04%	2.43%	39.08%	8.28%	7.91%
Insurance (Prop/Cas.)	49	0.91	7.37%	80.90%	37.88%	2.87%	19.36%	2.31%	19.10%	6.51%	6.40%
Internet	186	1.09	8.45%	97.37%	117.09%	4.87%	6.87%	4.54%	2.63%	8.35%	8.34%
IT Services	60	1.06	8.25%	94.26%	69.45%	3.87%	19.15%	3.13%	5.74%	8.00%	7.96%
Machinery	100	1.20	9.12%	83.95%	57.21%	3.37%	22.15%	2.62%	16.05%	8.19%	8.07%
Maritime	52	1.40	10.30%	36.99%	69.19%	3.87%	5.55%	3.66%	63.01%	6.25%	6.11%

ASWATH DAMODARAN'S 2011 WACC											
				For Tax Year 2012							
Industry Name	Number of Firms	Beta	Cost of Equity	E/(D+E)	Std Dev In Stock	Cost of Debt	Tax Rate	After-tax Cost of Debt	D/(D+E)	Pre-Tax Cost of Capital	Cost of Capital
Med Supp Invasive	83	0.85	6.99%	86.15%	79.18%	3.87%	11.86%	3.41%	13.85%	6.56%	6.50%
Med Supp Non-Invasive	146	1.03	8.09%	88.48%	84.89%	4.37%	12.73%	3.81%	11.52%	7.66%	7.60%
Medical Services	122	0.91	7.39%	66.91%	76.26%	3.87%	19.93%	3.10%	33.09%	6.22%	5.97%
Metal Fabricating	24	1.59	11.48%	86.59%	68.98%	3.87%	26.55%	2.84%	13.41%	10.46%	10.32%
Metals & Mining (Div.)	73	1.33	9.89%	87.64%	104.38%	4.87%	11.04%	4.33%	12.36%	9.27%	9.20%
Natural Gas (Div.)	29	1.33	9.87%	72.96%	48.77%	2.87%	21.98%	2.24%	27.04%	7.98%	7.81%
Natural Gas Utility	22	0.66	5.85%	59.74%	24.90%	2.37%	30.16%	1.66%	40.26%	4.45%	4.16%
Newspaper	13	1.76	12.53%	68.33%	90.74%	4.87%	25.13%	3.65%	31.67%	10.10%	9.72%
Office Equip/Supplies	24	1.38	10.18%	61.34%	64.26%	3.37%	21.05%	2.66%	38.66%	7.54%	7.27%
Oil/Gas Distribution	13	0.96	7.68%	63.17%	56.61%	3.37%	13.70%	2.91%	36.83%	6.09%	5.92%
Oilfield Svcs/Equip.	93	1.55	11.24%	81.36%	62.37%	3.37%	17.39%	2.78%	18.64%	9.77%	9.66%
Packaging & Container	26	1.16	8.86%	65.87%	41.59%	2.87%	24.23%	2.17%	34.13%	6.82%	6.58%
Paper/Forest Products	32	1.36	10.08%	62.55%	93.84%	4.87%	10.61%	4.35%	37.45%	8.13%	7.94%
Petroleum (Integrated)	20	1.18	9.01%	83.90%	38.99%	2.87%	27.41%	2.08%	16.10%	8.02%	7.89%
Petroleum (Producing)	176	1.34	9.97%	80.08%	88.11%	4.37%	11.14%	3.88%	19.92%	8.86%	8.76%
Pharmacy Services	19	1.12	8.63%	83.00%	59.43%	3.37%	24.67%	2.54%	17.00%	7.74%	7.60%
Pipeline MLPs	27	0.98	7.81%	70.94%	34.90%	2.87%	6.37%	2.69%	29.06%	6.38%	6.32%
Power	93	1.35	10.03%	40.19%	97.19%	4.87%	8.66%	4.45%	59.81%	6.95%	6.69%
Precious Metals	84	1.15	8.79%	92.43%	90.87%	4.87%	7.51%	4.50%	7.57%	8.50%	8.47%
Precision Instrument	77	1.28	9.57%	86.25%	65.33%	3.87%	13.94%	3.33%	13.75%	8.79%	8.71%
Property Management	31	1.13	8.72%	41.56%	82.21%	4.37%	18.59%	3.56%	58.44%	6.18%	5.70%
Public/Private Equity	11	2.18	15.01%	62.55%	77.54%	3.87%	3.79%	3.72%	37.45%	10.84%	10.78%
Publishing	24	1.25	9.40%	61.24%	64.98%	3.37%	18.55%	2.74%	38.76%	7.06%	6.82%
R.E.I.T.	5	1.47	10.73%	74.23%	49.61%	2.87%	1.04%	2.84%	25.77%	8.71%	8.70%
Railroad	12	1.44	10.56%	79.91%	42.95%	2.87%	23.74%	2.19%	20.09%	9.02%	8.88%
Recreation	56	1.45	10.62%	67.25%	70.55%	3.87%	17.37%	3.20%	32.75%	8.41%	8.19%
Reinsurance	13	0.93	7.47%	80.94%	30.40%	2.87%	7.22%	2.66%	19.06%	6.59%	6.55%
Restaurant	63	1.27	9.52%	88.68%	68.37%	3.87%	21.57%	3.04%	11.32%	8.88%	8.79%
Retail (Hardlines)	75	1.77	12.57%	80.43%	92.79%	4.87%	23.04%	3.75%	19.57%	11.06%	10.84%
Retail (Softlines)	47	1.44	10.55%	94.68%	60.91%	3.37%	24.64%	2.54%	5.32%	10.17%	10.13%
Retail Automotive	20	1.37	10.13%	72.41%	52.02%	3.37%	34.43%	2.21%	27.59%	8.27%	7.95%
Retail Building Supply	8	1.04	8.18%	87.67%	37.61%	2.87%	31.39%	1.97%	12.33%	7.52%	7.41%
Retail Store	37	1.29	9.64%	79.63%	67.71%	3.87%	25.02%	2.90%	20.37%	8.47%	8.27%
Retail/Wholesale Food	30	0.75	6.39%	70.75%	40.02%	2.87%	31.21%	1.97%	29.25%	5.36%	5.10%
Securities Brokerage	28	1.20	9.11%	18.85%	44.31%	2.87%	26.22%	2.12%	81.15%	4.05%	3.43%
Semiconductor	141	1.50	10.94%	92.30%	70.52%	3.87%	11.01%	3.44%	7.70%	10.39%	10.36%
Semiconductor Equip	12	1.79	12.70%	86.80%	68.70%	3.87%	15.17%	3.28%	13.20%	11.54%	11.46%
Shoe	19	1.25	9.43%	97.87%	55.52%	3.37%	24.31%	2.55%	2.13%	9.30%	9.28%
Steel	32	1.68	12.03%	68.31%	56.94%	3.37%	21.03%	2.66%	31.69%	9.29%	9.06%
Telecom. Equipment	99	1.02	8.00%	88.52%	87.77%	4.37%	13.16%	3.79%	11.48%	7.59%	7.52%
Telecom. Services	74	0.98	7.78%	74.58%	68.58%	3.87%	14.22%	3.32%	25.42%	6.79%	6.65%
Telecom. Utility	25	0.88	7.16%	50.98%	60.40%	3.37%	29.42%	2.38%	49.02%	5.30%	4.82%
Thrift	148	0.71	6.17%	77.32%	53.93%	3.37%	12.43%	2.95%	22.68%	5.53%	5.44%
Tobacco	11	0.85	7.03%	84.24%	41.53%	2.87%	31.03%	1.98%	15.76%	6.37%	6.23%
Toiletries/Cosmetics	15	1.30	9.73%	82.89%	60.34%	3.37%	20.30%	2.69%	17.11%	8.64%	8.53%
Trucking	36	1.24	9.38%	78.27%	59.88%	3.37%	25.48%	2.51%	21.73%	8.08%	7.89%
Utility (Foreign)	4	0.96	7.68%	39.21%	32.68%	2.87%	26.07%	2.12%	60.79%	4.76%	4.30%
Water Utility	11	0.66	5.85%	55.12%	18.89%	2.37%	35.22%	1.54%	44.88%	4.29%	3.91%
Wireless Networking	57	1.27	9.54%	78.70%	75.03%	3.87%	12.12%	3.40%	21.30%	8.33%	8.23%
Total Market	5891	1.15	8.81%	68.19%	75.08%	3.87%	15.48%	3.27%	31.81%	7.24%	7.05%

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H.15 Selected Interest Rates for Feb 02, 2012

Series Description

Unit:

Multipliers

Currency

Unique Identifier:

Market	Market	Market	Market	Market	Market yield on	Market yield on
yield on	yield on	yield on	yield on	U.S. Treasury	U.S. Treasury	U.S. Treasury
U.S.	U.S.	U.S.	U.S.	securities at 10-	securities at 20-	securities at 20-
Treasury	Treasury	Treasury	Treasury	year constant	year constant	Market yield on U.S. Treasury
securities	securities	securities	securities	maturity, quoted	maturity, quoted	securities at 20-year constant
at 1-year	at 5-year	at 5-year	at 10-year	on investment	on investment	maturity, quoted on investment
constant	constant	constant	constant	basis, inflation-	basis	basis, inflation-indexed
Percent:	F	Percent:	F	Percent:	Per Ye	Percent: Per Ye
					Percent:	Percent: Per Year

Multiplier: 1 1 1 1 1 1
Currency: NA NA NA NA NA NA NA
Unique Identifier: H15/H15/F H15/H15/F H15/H15/F H15/H15/F H15/H15/RIFLGF H15/H15/RIFLGF H15/H15/RIFLGFCY20 XII NWF

Used in 3
stage
growth
Model

Time Period

2011-09-16 0.1 0.91 -0.74 2.03 0.09 2.92 0.72 1.94 1.970625 2.2 2.128125

Average of 10 & 20 year
2.049375

Seeking Alpha ^α

Do You Believe The 2012 Earnings Estimates?

by: The Financial Lexicon

December 12, 2011 | includes: [AAPL](#), [AMZN](#), [BRK.B](#), [CAT](#), [DIS](#), [GE](#), [GOOG](#), [HD](#), [JNJ](#), [JPM](#), [MCD](#), [MRK](#), [PFE](#), [QQQ](#), [SPY](#), [UPS](#), [UTX](#), [WFC](#), [XLF](#), [XLI](#), [XLV](#), [XLY](#)

As of December 8, next year's bottom-up operating earnings estimate for the S&P 500 is currently \$107.60, which is a 10.47% increase from current 2011 year-end projections. This amounts to a forward price-to-earnings ratio (P/E) of 11.50, based on the current price of 1237.40. Whether an 11.50 forward P/E is cheap is certainly debatable, given the current state of the worldwide financial system, unimpressive labor market growth in the U.S., financial markets that appear dependent on money printing in order to rise, and general uncertainty among many investors and business owners alike. Rather than spend time joining the popular debate about whether the market is "cheap," I thought it would be more useful to take a look at the underlying components of the \$107.60 estimate so that investors can spend some time thinking for themselves about whether the number is even attainable.

Below is a table outlining the earnings per share (EPS) by sector, as well as for the S&P 500 as a whole, dating back to 2009. For 2011 and 2012, the EPS numbers are forward estimates. The table also includes estimated EPS growth for 2012.

	2009 EPS	2010 EPS	2011 EPS (estimate)	2012 EPS (estimate)	2012 EPS estimated growth
S&P 500	\$56.86	\$83.77	\$97.40	\$107.60	10.47%
Consumer Discretionary	\$10.96	\$18.20	\$20.53	\$22.82	11.15%
Consumer Staples	\$18.36	\$19.45	\$21.31	\$23.14	8.59%
Energy	\$17.26	\$35.21	\$50.13	\$51.59	2.91%
Financials	\$4.40	\$14.82	\$16.22	\$18.36	13.19%
Health Care	\$26.40	\$28.90	\$31.69	\$35.40	11.71%
Industrials	\$14.22	\$18.41	\$20.99	\$23.89	13.82%
Information Technology	\$17.48	\$26.25	\$31.20	\$35.79	14.71%
Materials	\$7.09	\$13.33	\$17.49	\$19.10	9.21%
Telecommunication Services	\$7.22	\$7.36	\$7.15	\$7.69	7.55%
Utilities	\$11.50	\$12.34	\$12.52	\$12.53	0.08%

At the moment, technology, industrials, financials, health care, and consumer discretionary are projected to provide the largest percentage increases in growth for 2012. According to the December 2, 2011 S&P 500 GICS Sector Scorecard, those five sectors have the following weightings in the S&P 500: Technology 19.52%; Industrials 10.70%, Financials 13.43%, Health Care 11.51% and Consumer Discretionary 10.70%. The total weighting for all five sectors combined is 65.86%.

As the sector with the largest weighting in the S&P 500 and the largest projected growth rate for 2012, technology will play an important role in determining whether the S&P 500 hits its 2012 earnings estimates. Will companies like Apple ([AAPL](#)) and Google ([GOOG](#)) live up to expectations? Currently, these two companies together have a 20.58% total weighting in the Nasdaq 100 ([QQQ](#)), a 4.6% total weighting in the S&P 500, as well as FY 2012 earnings estimates above the technology sector estimate. They will both play an important role in the ability of the information technology sector to live up to earnings expectations, as well as an important role on the 2012 performance of the Nasdaq 100 and S&P 500.

This same exercise can be applied across the various sectors to determine which stocks will be critically important in

order for the S&P 500 to attain its 2012 earnings estimates. If you are interested in further exploring which stocks will be the most important in helping the S&P 500 reach its current 2012 forward estimates, here is a bit of information from a few other sectors to help you get started on your research.

The XLI, an ETF tracking the industrials, has 61 holdings, the top four of which have a total index weighting of 26.6%. Of these four stocks, General Electric (GE) and United Parcel Service (UPS) have 2012 earnings projections quite close to the sector estimate. Number three on the list, United Technologies (UTX), trails the sector growth estimate by several hundred basis points, and Caterpillar (CAT), with a 5.13% index weighting, is expected to more than double the sector's growth rate in 2012.

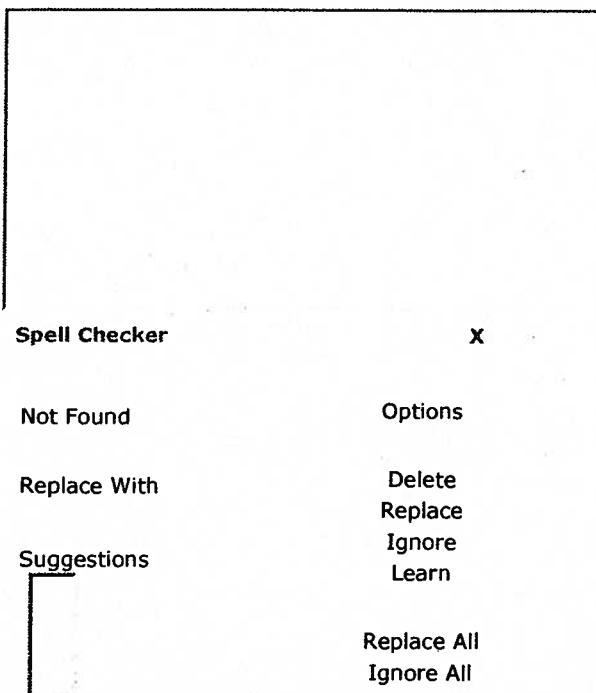
Out of 80 holdings in the XLF, the popular financial sector ETF, the top three holdings are Wells Fargo (WFC) at a 9.17% index weighting, Berkshire Hathaway 'B' (BRK.B) at 8.81%, and JPMorgan Chase (JPM) at 8.35%. Together, these three companies, which make up just 3.75% of the fund's total holdings, hold a 26.33% weighting in the index the fund tracks. Berkshire Hathaway and Wells Fargo have growth projections currently above the sector average, while JPMorgan trails the 2012 sector average by quite a bit.

Within the health care sector, the top three holdings out of a total of 51 holdings in the XLV are Johnson & Johnson (JNJ), Pfizer (PFE), and Merck (MRK). Together, they hold a 34.16% weighting in the index the fund tracks. At the same time, these three companies have projected 2012 growth rates well below the sector's expected growth. This means that other companies with much smaller weightings will need to pick up the slack in a big way in 2012.

Finally, the XLY, an ETF tracking the consumer discretionary space, has 77 holdings, the top four of which have a total index weighting of 24.75%. The top weighting belongs to McDonald's (MCD), which has 2012 growth projections below the sector's estimates. Disney (DIS) and Home Depot (HD), numbers three and four on the list, have 2012 growth projections firmly above the sector estimate, while number two on the list, Amazon.com (AMZN), a company also in the Nasdaq 100, has growth projections that far exceed the sector estimate.

For those investors interested in creating a list of stocks that will be most important in helping the S&P 500 reach its 2012 earnings projections, the previous paragraphs should provide a framework for your research. Good luck and happy investing in 2012!

Disclosure: I am long JNJ, MRK.



FINANCIAL TIMES

January 8, 2012 6:26 pm

Earnings growth falters for S&P 500

By Michael Mackenzie and Ed Crooks in New York



Expectations of Alcoa's profits have been scaled back sharply in recent months

US corporate earnings grew at their slowest pace in the fourth quarter of 2011 for more than two years, according to analysts, and are expected to slow even more in the first quarter of this year as profits are hit by global economic turbulence.

The US earnings season begins on Monday with Alcoa, one of the world's largest aluminium producers, reporting fourth-quarter results after the stock market closes.

Expectations of Alcoa's profits have been scaled back sharply in recent months, and the average analyst forecast is now for a loss. It said last Thursday it would take a \$155m-\$165m charge in the quarter for the costs of shutting down temporarily or permanently 12 per cent of its smelting capacity as it attempts to cut costs and respond to a weaker aluminium price.

Corporate earnings for the S&P 500 constituents as a whole are set to break a run of eight consecutive quarters of double-digit gains. As the outlook for the world economy has darkened, with the crisis in Europe deepening and signs of strain in emerging economies, expectations for US companies's earnings growth have been scaled back.

Analysts now expect that average earnings growth for the S&P 500 in the fourth quarter of 2011 over the same quarter in 2010 will be 7.2 per cent. At the start of October, the average forecast was for 14.5 per cent growth, according to S&P Capital IQ.

But the comparison of 2011 to 2010 is helped by AIG, the insurance group 77 per cent owned by the US government, which suffered a big loss at the end of 2010. Excluding

financial companies, S&P earnings growth is expected to have been 6.9 per cent in the fourth quarter.

Average earnings growth in the first quarter of 2012 is expected to be just 3 per cent, according to John Butters, senior analyst at FactSet, the financial information service.

"Clearly we are in a cycle of reaching pinnacle earnings and at some point we are going to drop," he said.

For 2011, S&P 500 earnings are set to hit a record \$96.38 per share, surpassing 2007's high-water mark of \$87 a share according to FactSet. For 2012, S&P earnings are forecast to reach \$106.67 per share, a rise of 10.7 per cent, on a return to stronger profit growth in the second half of the year. However, that estimate has steadily fallen from \$113 a share in August.

Investors remain sceptical about what they see as rosy estimates for earnings from analysts amid doubts about the economy's growth prospects and the ability of companies to continue cutting costs.

Optimism for the second half of the year is tempered by the fact that such longer-term calls have a greater risk of being wrong.

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Seeking Alpha α

2012 S&P 500 Earnings Estimates, Multiples And Price Projections

by: StopAlerts

September 30, 2011 | includes: IIV, SPY

Bloomberg says the consensus S&P 500 operating earnings estimate for 2012 is approximately \$110. Standard & Poor's estimates 2012 at \$111.46. At the other end of the spectrum, Doug Cliggott estimates \$81.00.

Cliggott is chief U.S. equity strategist at Credit Suisse, and was formerly chief investment strategist at J.P. Morgan.

Standard & Poor's and Cliggott may make reasonable bookends for projection ranges in scenario analysis. We would be reluctant to use an estimate above that of Standard & Poor's, because that is about at the consensus level, and the evidence shows a negative tilt to economic and profits projections.

Standard & Poor's estimates 2011 at \$98.04. That puts today's 1160 on the S&P 500 trading at about 11.8X. When the index was at about 1365 in late April, the multiple was about 13.9X.

If S&P is right about 2012, then the current 11.8X multiple of today would probably hold. More likely, since the profits would not have fallen, the current market level would probably seem too low, and the 13.9x of April might be seen as more appropriate.

If we apply the 11.8X to 13.9X multiple to the \$111.46 estimate, we get an index price estimate of 1315 to 1549.

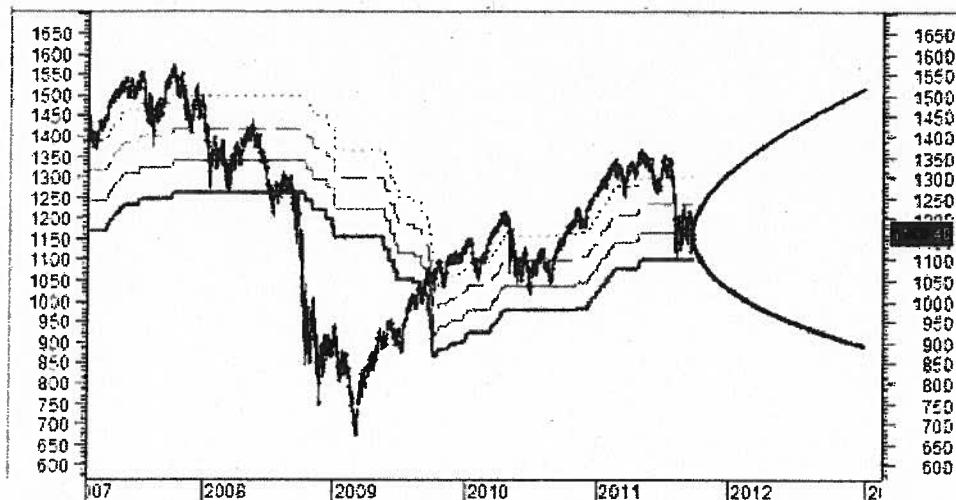
However, if Cliggott is correct, then today's multiple may be the top, and 8X could be the bottom, perhaps more likely 10X.

The \$81.00 times the 8X, 10X and 11.8X would result in an index level of 648 to 810 to 956.

For contrast, the following chart projects the 90% probability range for the index based on the trailing one-year volatility of the index. The high and low of that projection is 1515 and 888.

Side Note: The red lines mark 5%, 10% 15% and 20% offsets from the 1 year trailing highs.

[Click to enlarge](#)



If the probability were to be set at 80%, the high and low of the range by 12/31/11 would be 1429 to 942.

See our recent article "[How Far Is Down?](#)"

Directly Related Securities: [SPY](#), [IVV](#), [VFINX](#).

Disclosure: StopAlerts.com is a service of QVM Group LLC, a registered investment advisor. QVM has no positions in any mentioned security in any managed account as of the creation date of this article (September 30, 2011). The QVM has written and currently holds near-term, far out-of-the-money cash secured PUTs on SPY.

Disclaimer: This article provides opinions and information, but does not contain recommendations or personal investment advice to any specific person for any particular purpose. Do your own research or obtain suitable personal advice. You are responsible for your own investment decisions. This article is presented subject to our full disclaimer found on our site [available here](#).

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SURVEY OF PROFESSIONAL FORECASTERS

Release Date: February 10, 2012

FIRST QUARTER 2012

Forecasters See Stronger Labor Market

The outlook for growth in the U.S. economy looks mostly unchanged from that of three months ago, according to 45 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The panel expects real GDP to grow at an annual rate of 2.2 percent this quarter, down from the previous estimate of 2.4 percent. On an annual-average over annual-average basis, the forecasters see real GDP growing 2.3 percent in 2012, down from the previous estimate of 2.4 percent. The forecasters predict real GDP will grow 2.7 percent in 2013, 3.0 percent in 2014, and 3.1 percent in 2015.

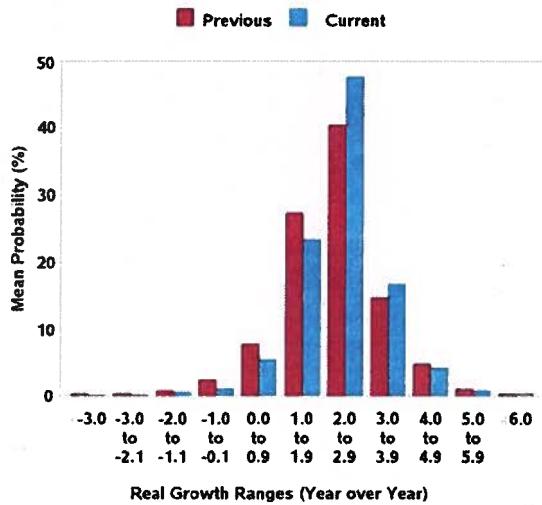
Stronger conditions in the labor market accompany the nearly unchanged outlook for real output. Unemployment is projected to be an annual average of 8.3 percent in 2012, before falling to 7.9 percent in 2013, 7.4 percent in 2014, and 6.7 percent in 2015. The estimates for 2012 to 2014 are 0.5 percentage point lower than the projections in the last survey.

On the employment front, the forecasters have revised upward their estimates of the growth in jobs in three out of the next four quarters. The forecasters see nonfarm payroll employment growing at a rate of 160,100 jobs per month this quarter and 141,900 jobs per month next quarter. The forecasters' projections for the annual-average level of nonfarm payroll employment suggest job gains at a monthly rate of 144,100 in 2012 and 162,900 in 2013, as the table below shows. (These annual-average estimates are computed as the year-to-year change in the annual-average level of nonfarm payroll employment, converted to a monthly rate.)

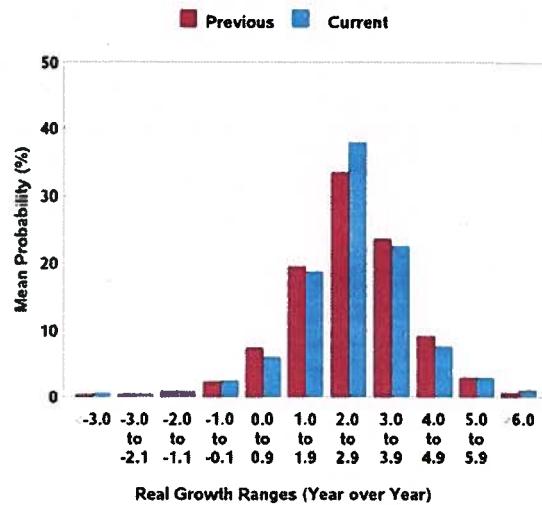
	Real GDP (%)		Unemployment Rate (%)		Payrolls (000s/month)	
	Previous	New	Previous	New	Previous	New
<i>Quarterly data:</i>						
2012:Q1	2.4	2.2	8.9	8.4	121.0	160.1
2012:Q2	2.4	2.3	8.9	8.3	126.3	141.9
2012:Q3	2.8	2.6	8.8	8.2	152.4	145.2
2012:Q4	2.7	3.0	8.7	8.1	126.3	161.7
2013:Q1	N.A.	2.8	N.A.	8.0	N.A.	155.9
<i>Annual data (projections are based on annual-average levels):</i>						
2012	2.4	2.3	8.8	8.3	123.2	144.1
2013	2.7	2.7	8.4	7.9	N.A.	162.9
2014	3.5	3.0	7.8	7.4	N.A.	N.A.
2015	N.A.	3.1	N.A.	6.7	N.A.	N.A.

The charts below provide some insight into the degree of uncertainty the forecasters have about their projections for the rate of growth in the annual-average level of real GDP. Each chart presents the forecasters' previous and current estimates of the probability that growth will fall into each of 11 ranges. The forecasters have revised upward their estimate of the probability that growth will fall into the range of 2.0 to 2.9 percent in 2012, 2013, and 2014.

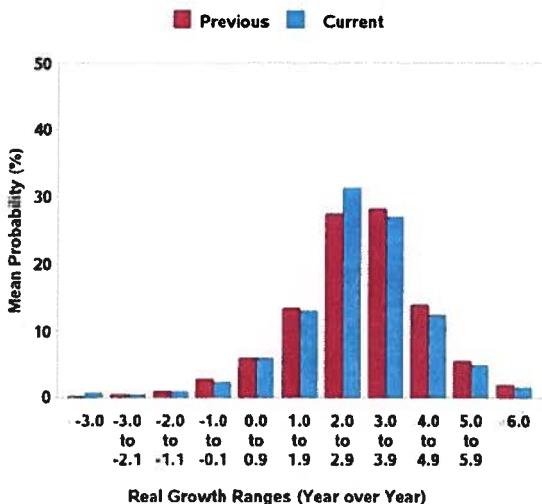
Mean Probabilities for Real GDP Growth in 2012



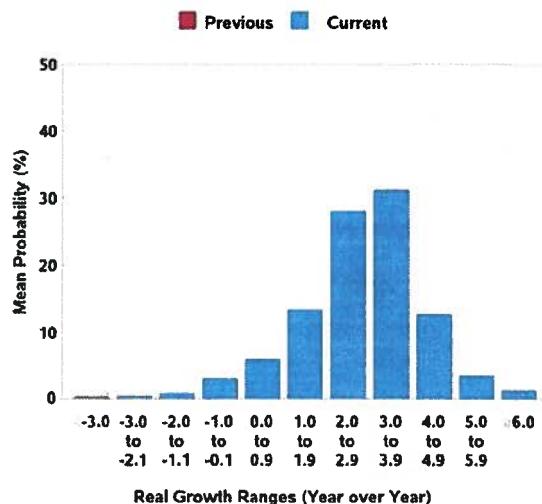
Mean Probabilities for Real GDP Growth in 2013



Mean Probabilities for Real GDP Growth in 2014

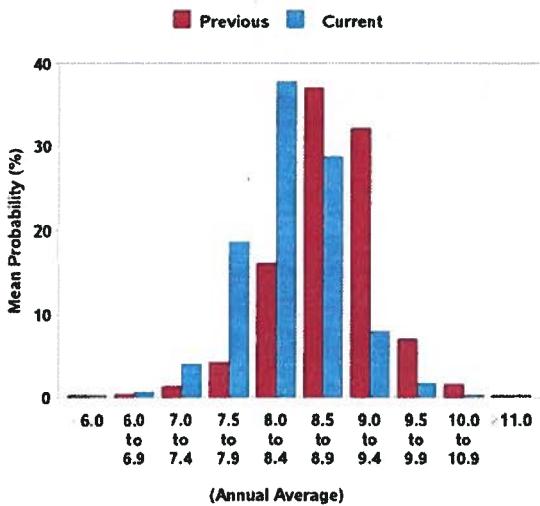


Mean Probabilities for Real GDP Growth in 2015

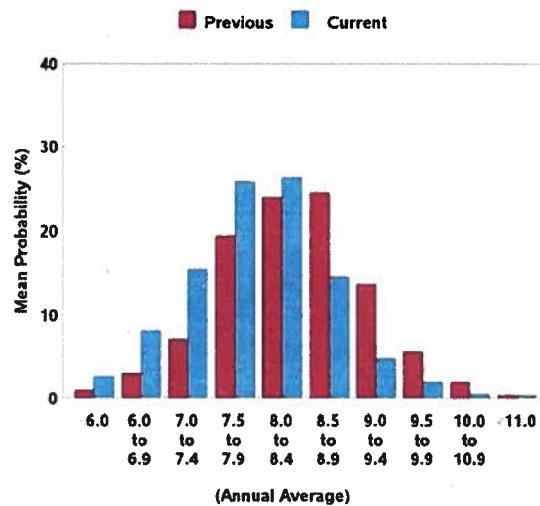


The forecasters' density projections, as shown in the charts below, shed light on the odds of a recovery in the labor market over the next four years. Each chart for unemployment presents the forecasters' previous and current estimates of the probability that unemployment will fall into each of 10 ranges. The forecasters have shifted the distributions of density to the left for 2012, 2013, and 2014, indicating expectations of lower unemployment rates compared with their previous estimates.

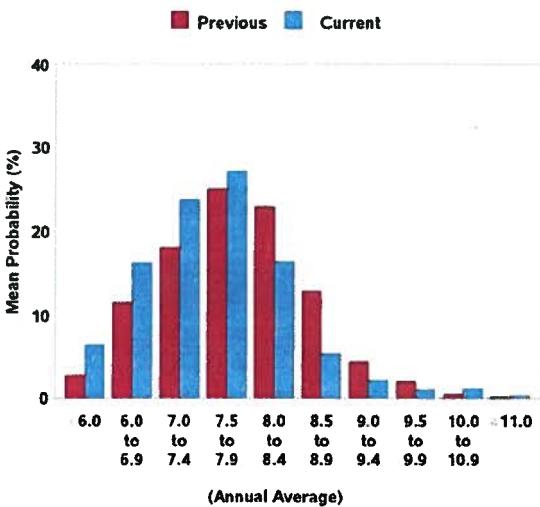
Mean Probabilities for Unemployment Rate in 2012



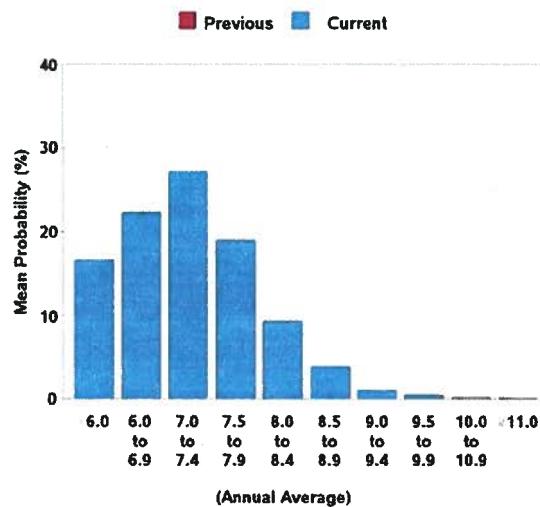
Mean Probabilities for Unemployment Rate in 2013



Mean Probabilities for Unemployment Rate in 2014



Mean Probabilities for Unemployment Rate in 2015



Forecasters Hold the Line on Their Expectations for Near-Term Inflation

The forecasters expect current-quarter headline CPI inflation to average 2.0 percent, unchanged from the last survey's estimate. The forecasters predict current-quarter headline PCE inflation of 1.7 percent, also unchanged from the survey of three months ago.

The current outlook for the headline and core measures of CPI and PCE inflation during the next two years remains mostly unchanged. Measured on a fourth-quarter over fourth-quarter basis, headline CPI inflation is expected to average 2.0 percent in 2012, up from 1.9 percent in the last survey, and 2.2 percent in 2013, unchanged from the previous estimate. Forecasters expect fourth-quarter over fourth-quarter headline PCE inflation to average 1.9 percent in 2012, up from 1.7 percent in the last survey, and 2.0 percent in 2013, unchanged from the previous estimate.

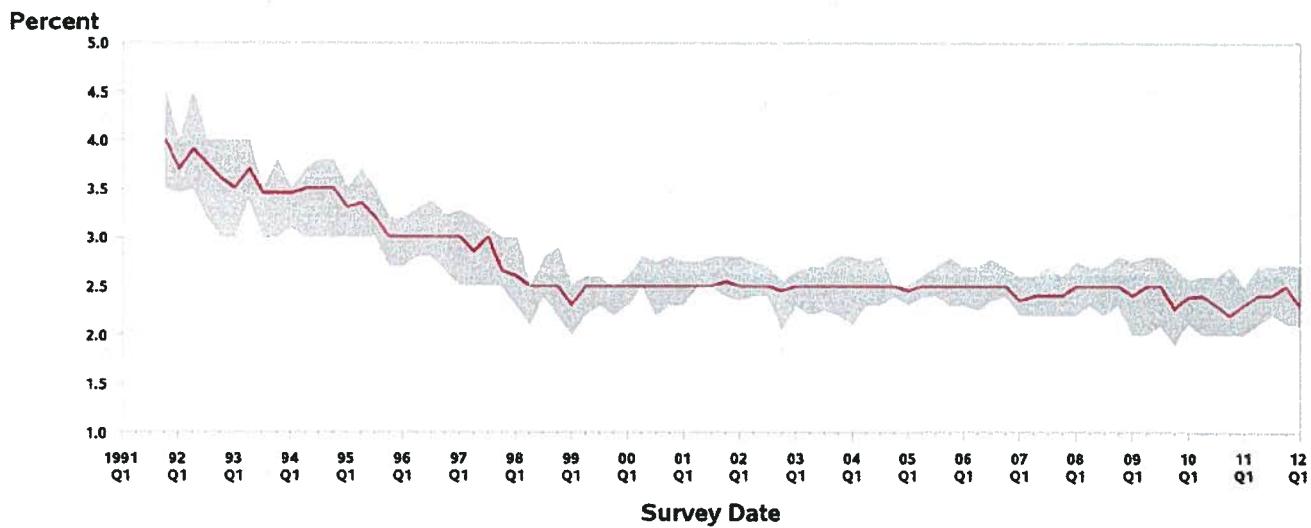
Over the next 10 years, 2012 to 2021, the forecasters expect headline CPI inflation to average 2.30 percent at an annual rate. This estimate is lower than that from the last survey, when the forecasters thought headline CPI inflation over the 10-year period from 2011 to 2020 would average 2.50 percent. There is almost no change in the corresponding estimates for 10-year annual-average PCE inflation. Currently, that 10-year estimate stands at 2.15 percent.

Short-Run and Long-Run Projections for Inflation (Annualized Percentage Points)

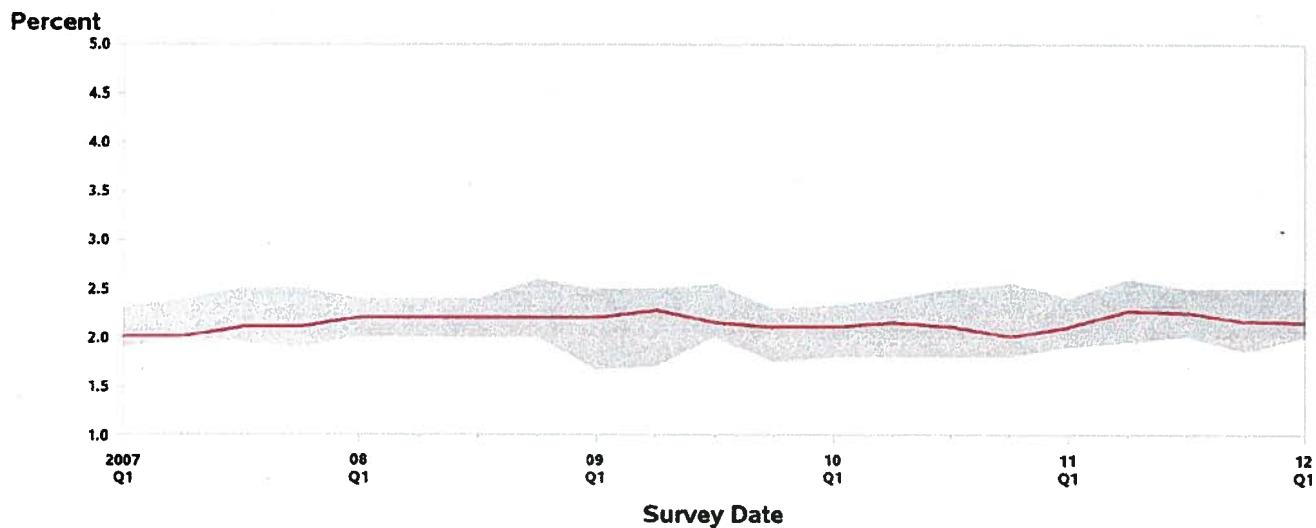
	Headline CPI		Core CPI		Headline PCE		Core PCE	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current
<i>Quarterly</i>								
2012:Q1	2.0	2.0	1.8	1.9	1.7	1.7	1.6	1.6
2012:Q2	1.9	2.0	1.8	1.8	1.6	1.7	1.6	1.7
2012:Q3	2.0	2.1	1.8	1.9	1.8	1.8	1.7	1.7
2012:Q4	2.0	2.1	1.8	2.0	1.7	2.0	1.6	1.7
2013:Q1	N.A.	2.1	N.A.	2.0	N.A.	2.0	N.A.	1.7
<i>Q4/Q4 Annual Averages</i>								
2012	1.9	2.0	1.8	1.9	1.7	1.9	1.6	1.6
2013	2.2	2.2	2.0	2.1	2.0	2.0	1.8	1.8
2014	N.A.	2.3	N.A.	2.2	N.A.	2.1	N.A.	2.0
<i>Long-Term Annual Averages</i>								
2011-2015	2.40	N.A.	N.A.	N.A.	2.10	N.A.	N.A.	N.A.
2012-2016	N.A.	2.30	N.A.	N.A.	N.A.	2.10	N.A.	N.A.
2011-2020	2.50	N.A.	N.A.	N.A.	2.16	N.A.	N.A.	N.A.
2012-2021	N.A.	2.30	N.A.	N.A.	N.A.	2.15	N.A.	N.A.

The charts below show the median values (the red line) and the associated interquartile ranges (the gray area around the red line) for the projections for the 10-year annual-average CPI and PCE inflation. The top panel shows the downward revision for CPI inflation, from 2.50 percent to 2.30 percent. The bottom panel highlights the virtually unchanged 10-year forecast for PCE inflation.

Projections for the 10-Year Annual-Average Rate of CPI Inflation (Median and Interquartile Range)

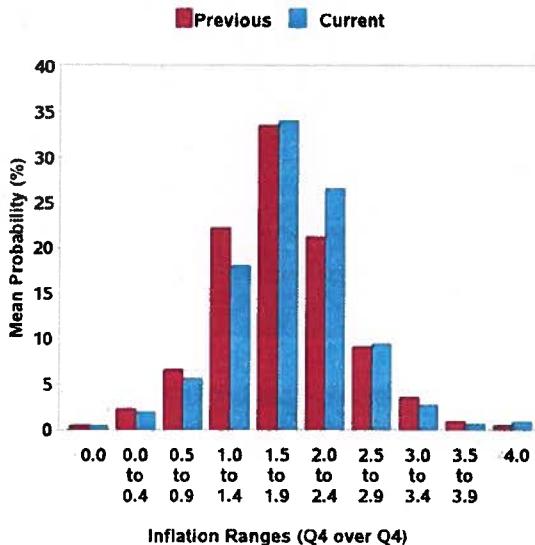


Projections for the 10-Year Annual-Average Rate of PCE Inflation (Median and Interquartile Range)

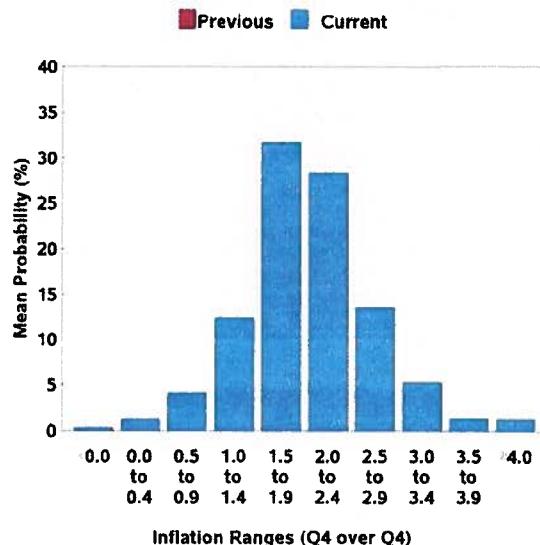


The figures below show the probabilities that the forecasters are assigning to the possibility that fourth-quarter over fourth-quarter core PCE inflation in 2012 and 2013 will fall into each of 10 ranges. For 2012, the forecasters assign a higher chance than previously that core PCE inflation will fall in the range of 1.5 to 2.4 percent.

Mean Probabilities for Core PCE Inflation in 2012



Mean Probabilities for Core PCE Inflation in 2013



Lower Risk of a Negative Quarter

The forecasters have revised downward the chance of a contraction in real GDP in any of the next four quarters. For the current quarter, they predict a 9.5 percent chance of negative growth, down from 16.6 percent in the survey of three months ago. As the table below shows, the panelists have also made downward revisions to their forecasts for the following three quarters.

Risk of a Negative Quarter (%)

<i>Quarterly data:</i>	<i>Previous</i>	<i>New</i>
2012: Q1	16.6	9.5
2012: Q2	17.3	13.4
2012: Q3	17.1	14.7
2012: Q4	17.0	14.8
2013: Q1	N.A.	15.8

Forecasters State Their Views on House Prices

In this survey, a special question asked panelists to provide their forecasts for fourth-quarter over fourth-quarter growth in house prices, as measured by a number of alternative indices. The panelists were allowed to choose from a provided list of indices or to write in their own index. For each index of their choosing, the panelists provided forecasts of growth in 2012 and 2013.

Twenty-four panelists answered the special question. Some panelists provided projections for more than one index. The table below provides a summary of the forecasters' responses. For some indices, the number of responses (N) is very small. The median estimates for the six house-price indices listed in the table below range from -0.5 percent to -0.1 percent in 2012 and 0.6 percent to 2.9 percent in 2013. In other words, the panelists expect some further, but minor, declines in prices in 2012, followed by a rebound in 2013.

*Projections for Growth in Various Indices of House Prices
Q4/Q4, Percentage Points*

Index	2012 (Q4/Q4 Percent Change)			2013 (Q4/Q4 Percent Change)		
	N	Mean	Median	N	Mean	Median
S&P/Case-Shiller: U.S. National	11	-0.2	-0.3	11	1.2	1.5
S&P/Case-Shiller: Composite 20	5	-0.1	-0.5	5	2.4	2.5
FHFA: U.S. Total	6	-1.3	-0.1	6	1.8	2.0
FHFA: Purchase Only	6	-0.1	-0.1	6	2.6	2.8
CoreLogic: National HPI, incl Distressed Sales (Single Family Combined)	4	-0.3	-0.1	3	0.9	0.6
NAR Median: Total Existing	2	-0.2	-0.2	2	2.9	2.9

Forecasters Reduce Estimates for Long-Run Growth in Output and Productivity and Returns on Financial Assets

In first-quarter surveys, the forecasters provide their long-run projections for an expanded set of variables, including growth in output and productivity, as well as returns on financial assets.

As the table below shows, the forecasters have reduced their long-run estimates for the annual-average rate of growth in real GDP. Currently, the forecasters expect real GDP to grow 2.64 percent per year over the next 10 years, down from 2.84 percent in the survey of 2011 Q1.

Similarly, productivity growth is now expected to average 1.85 percent, down from 2.00 percent. Downward revisions to the return on financial assets accompany the current outlook. The forecasters see the S&P 500 returning an annual-average 6.80 percent per year over the next 10 years, down from 7.25 percent. The forecasters expect 10-year Treasuries to return 4.00 percent per year over the next 10 years, down from 4.88 percent. Three-month Treasury bills will return 2.50 percent, down from 3.00 percent.

	<i>Long-Term (10-year) Forecasts (%)</i>	
	<i>First Quarter 2011</i>	<i>Current Survey</i>
<i>Real GDP Growth</i>	2.84	2.64
<i>Productivity Growth</i>	2.00	1.85
<i>Stock Returns (S&P 500)</i>	7.25	6.80
<i>Bond Returns (10-year)</i>	4.88	4.00
<i>Bill Returns (3-month)</i>	3.00	2.50

The Federal Reserve Bank of Philadelphia thanks the following forecasters for their participation in recent surveys:

Robert J. Barbera, Mount Lucas Management; **Christine Chmura, Ph.D.** and **Xiaobing Shuai, Ph.D.**, Chmura Economics & Analytics; **Gary Ciminero, CFA**, GLC Financial Economics; **David Crowe**, National Association of Home Builders; **Rajeev Dhawan**, Georgia State University; **Shawn Dubravac**, Consumer Electronics Association; **Michael R. Englund**, Action Economics, LLC; **Stephen Gallagher**, Societe Generale; **Timothy Gill**, NEMA; **James Glassman**, JPMorgan Chase & Co.; **Ethan Harris**, Bank of America-Merrill Lynch; **Keith Hembre**, Nuveen Asset Management; **Peter Hooper**, Deutsche Bank Securities, Inc.; **IHS Global Insight**; **Peter Jaquette**, PIRA Energy Group; **Fred Joutz**, Benchmark Forecasts and Research Program on Forecasting, George Washington University; **Kurt Karl**, Swiss Re; **N. Karp**, BBVA Compass; **Walter Kemmsies**, Moffatt & Nichol; **Jack Kleinhenz**, Kleinhenz & Associates, Inc.; **Thomas Lam**, OSK Group/DMG & Partners; **L. Douglas Lee**, Economics from Washington; **Allan R. Leslie**, Economic Consultant; **John Lonski**, Moody's Capital Markets Group; **Macroeconomic Advisers, LLC**; **Dean Maki**, Barclays Capital; **Jim Meil** and **Arun Raha**, Eaton Corporation; **Anthony Metz**, Pareto Optimal Economics; **Ardavan Mobasher**, AIG Global Economic Research; **Michael Moran**, Daiwa Capital Markets America; **Joel L. Naroff**, Naroff Economic Advisors; **Mark Nielson, Ph.D.**, MacroEcon Global Advisors; **Michael P. Niemira**, International Council of Shopping Centers; **Luca Noto**, Anima Sgr; **Martin A. Regalia**, U.S. Chamber of Commerce; **David Resler**, Nomura Securities International, Inc.; **Philip Rothman**, East Carolina University; **Chris Rupkey**, Bank of Tokyo-Mitsubishi UFJ; **John Silvia**, Wells Fargo; **Allen Sinai**, Decision Economics, Inc; **Tara M. Sinclair**, Research Program on Forecasting, George Washington University; **David Sloan**, Thomson Reuters; **Sean M. Snaith**, Ph.D., University of Central Florida; **Constantine G. Soras**, Ph.D., CGS Economic Consulting; **Neal Soss**, Credit Suisse; **Stephen Stanley**, Pierpont Securities; **Charles Steindel**, New Jersey Department of the Treasury; **Susan M. Sterne**, Economic Analysis Associates, Inc.; **Thomas Kevin Swift**, American Chemistry Council; **Andrew Tilton** and **Edward F. McKelvey**, Goldman Sachs; **Lea Tyler**, Oxford Economics USA, Inc.; **Jay N. Woodworth**, Woodworth Holdings, Ltd.; **Mark Zandi**, Moody's Analytics

This is a partial list of participants. We also thank those who wish to remain anonymous.

SUMMARY TABLE
SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS

	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1		2012	2013	2014	2015
							(YEAR-OVER-YEAR)			
PERCENT GROWTH AT ANNUAL RATES										
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	2.2	2.3	2.6	3.0	2.8		2.3	2.7	3.0	3.1
2. GDP PRICE INDEX (PERCENT CHANGE)	1.6	1.6	2.1	1.6	1.7		1.6	2.0	N.A.	N.A.
3. NOMINAL GDP (\$ BILLIONS)	3.9	4.2	4.3	4.8	4.7		4.0	4.5	N.A.	N.A.
4. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE) (AVG MONTHLY CHANGE)	1.5 160.1	1.3 141.9	1.3 145.2	1.5 161.7	1.4 155.9		1.3 144.1	1.5 162.9	N.A. N.A.	N.A. N.A.
VARIABLES IN LEVELS										
5. UNEMPLOYMENT RATE (PERCENT)	8.4	8.3	8.2	8.1	8.0		8.3	7.9	7.4	6.7
6. 3-MONTH TREASURY BILL (PERCENT)	0.0	0.1	0.1	0.1	0.1		0.1	0.1	0.8	1.7
7. 10-YEAR TREASURY BOND (PERCENT)	2.0	2.1	2.3	2.4	2.5		2.2	2.9	3.5	4.0
	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1		2012	2013	2014	
							(Q4-OVER-Q4)			
INFLATION INDICATORS										
8. CPI (ANNUAL RATE)	2.0	2.0	2.1	2.1	2.1		2.0	2.2	2.3	
9. CORE CPI (ANNUAL RATE)	1.9	1.8	1.9	2.0	2.0		1.9	2.1	2.2	
10. PCE (ANNUAL RATE)	1.7	1.7	1.8	2.0	2.0		1.9	2.0	2.1	
11. CORE PCE (ANNUAL RATE)	1.6	1.7	1.7	1.7	1.7		1.6	1.8	2.0	

THE FIGURES ON EACH LINE ARE MEDIANES OF 45 INDIVIDUAL FORECASTERS.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.

SURVEY OF PROFESSIONAL FORECASTERS

First Quarter 2012

Tables

Note: Data in these tables listed as "actual" are the data that were available to the forecasters when they were sent the survey questionnaire on January 27; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before February 7, 2012.

TABLE ONE
MAJOR MACROECONOMIC INDICATORS
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL				FORECAST				ACTUAL				FORECAST			
		2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2011 ANNUAL	2012 ANNUAL	2013 ANNUAL	2014 ANNUAL	2015 ANNUAL					
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	42	15294	15441	15602	15768	15954	16140	15088	15695	16403	N.A.	N.A.					
2. GDP PRICE INDEX (2005=100)	42	113.94	114.40	114.86	115.45	115.90	116.40	113.31	115.15	117.40	N.A.	N.A.					
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	N.A.	1593.5	1616.9	1642.4	1656.5	1668.8	N.A.	1628.6	1703.0	N.A.	N.A.					
4. UNEMPLOYMENT RATE (PERCENT)	44	8.7	8.4	8.3	8.2	8.1	8.0	9.0	8.3	7.9	7.4	6.7					
5. NONFARM PAYROLL EMPLOYMENT (THOUSANDS)	41	131733	132213	132639	133075	133560	134027	131153	132882	134836	N.A.	N.A.					
6. INDUSTRIAL PRODUCTION (2007=100)	40	95.1	95.9	96.7	97.5	98.2	99.0	93.8	97.1	100.3	N.A.	N.A.					
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	40	0.66	0.66	0.68	0.71	0.74	0.77	0.61	0.70	0.83	N.A.	N.A.					
8. 3-MONTH TREASURY BILL RATE (PERCENT)	39	0.01	0.03	0.05	0.06	0.08	0.08	0.05	0.06	0.12	0.84	1.70					
9. AAA CORPORATE BOND YIELD (PERCENT)	35	3.93	3.90	4.00	4.09	4.23	4.25	4.64	4.05	4.41	N.A.	N.A.					
10. BAA CORPORATE BOND YIELD (PERCENT)	32	5.25	5.24	5.29	5.32	5.32	5.47	5.66	5.30	5.63	N.A.	N.A.					
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	41	2.05	2.01	2.14	2.30	2.40	2.55	2.79	2.21	2.86	3.48	4.00					
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	45	13422	13497	13573	13660	13762	13857	13313	13620	13985	14407	14854					
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	44	9481.3	9535.2	9588.7	9646.6	9708.2	9761.8	9421.1	9617.6	9839.6	N.A.	N.A.					
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	41	1471.9	1497.5	1521.6	1547.3	1570.3	1590.9	1432.4	1534.9	1627.5	N.A.	N.A.					
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	41	333.9	338.8	343.8	350.3	358.0	365.6	326.2	347.7	380.4	N.A.	N.A.					
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	40	1043.7	1046.1	1043.8	1044.4	1042.6	1044.4	1054.8	1043.1	1044.4	N.A.	N.A.					
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	39	1440.7	1437.0	1433.5	1431.6	1432.1	1432.5	1453.4	1433.3	1434.2	N.A.	N.A.					
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	40	56.0	40.0	44.5	45.0	46.4	45.6	35.6	46.0	45.4	N.A.	N.A.					
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	41	-405.8	-405.0	-408.5	-412.9	-410.0	-410.0	-412.4	-408.0	-408.6	N.A.	N.A.					

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.

TABLE TWO
MAJOR MACROECONOMIC INDICATORS
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORECASTERS	Q4 TO Q1 2011 2012	Q1 TO Q2 2012	Q2 TO Q3 2012	Q3 TO Q4 2012	Q4 TO Q1 2012 2013	2011 TO 2012	2012 TO 2013	2013 TO 2014	2014 TO 2015
1. GROSS DOMESTIC PRODUCT (GDP) (\$ BILLIONS)	42	3.9	4.2	4.3	4.8	4.7	4.0	4.5	N.A.	N.A.
2. GDP PRICE INDEX (2005=100)	42	1.6	1.6	2.1	1.6	1.7	1.6	2.0	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES (\$ BILLIONS)	26	3.5	6.0	6.5	3.5	3.0	6.6	4.6	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	44	-0.3	-0.1	-0.1	-0.1	-0.1	-0.7	-0.4	-0.5	-0.7
5. NONFARM PAYROLL EMPLOYMENT (PERCENT CHANGE) (AVG MONTHLY CHANGE)	41 41	1.5 160.1	1.3 141.9	1.3 145.2	1.5 161.7	1.4 155.9	1.3 144.1	1.5 162.9	N.A. N.A.	N.A. N.A.
6. INDUSTRIAL PRODUCTION (2007=100)	40	3.6	3.4	3.1	3.0	3.3	3.5	3.3	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	40	4.9	12.3	15.4	15.2	22.0	14.5	19.3	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	39	0.02	0.02	0.01	0.02	0.00	0.01	0.06	0.72	0.87
9. AAA CORPORATE BOND YIELD (PERCENT)	35	-0.03	0.10	0.09	0.14	0.02	-0.59	0.36	N.A.	N.A.
10. BAA CORPORATE BOND YIELD (PERCENT)	32	-0.01	0.04	0.03	0.00	0.14	-0.36	0.33	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	41	-0.04	0.13	0.16	0.10	0.15	-0.59	0.65	0.62	0.52
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	45	2.2	2.3	2.6	3.0	2.8	2.3	2.7	3.0	3.1
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	44	2.3	2.3	2.4	2.6	2.2	2.1	2.3	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	41	7.1	6.6	6.9	6.1	5.4	7.2	6.0	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	41	6.0	6.1	7.7	9.1	8.8	6.6	9.4	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	40	0.9	-0.9	0.3	-0.7	0.7	-1.1	0.1	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	39	-1.0	-1.0	-0.5	0.1	0.1	-1.4	0.1	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	40	-16.0	4.5	0.5	1.4	-0.8	10.4	-0.6	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	41	0.8	-3.5	-4.4	2.9	0.0	4.3	-0.6	N.A.	N.A.

NOTE: FIGURES FOR UNEMPLOYMENT RATE, TREASURY BILL RATE, AAA CORPORATE BOND YIELD, BAA CORPORATE BOND YIELD, AND 10-YEAR TREASURY BOND YIELD ARE CHANGES IN THESE RATES, IN PERCENTAGE POINTS.
 FIGURES FOR CHANGE IN PRIVATE INVENTORIES AND NET EXPORTS ARE CHANGES IN BILLIONS OF CHAIN-WEIGHTED DOLLARS.
 ALL OTHERS ARE PERCENTAGE CHANGES AT ANNUAL RATES.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.

TABLE THREE
MAJOR PRICE INDICATORS
MEDIAN OF FORECASTER PREDICTIONS

NUMBER OF FORECASTERS	ACTUAL		FORECAST (Q/Q)					ACTUAL		FORECAST (Q4/Q4)		
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2011 ANNUAL	2012 ANNUAL	2013 ANNUAL	2014 ANNUAL		
1. CONSUMER PRICE INDEX (ANNUAL RATE)	43	0.9	2.0	2.0	2.1	2.1	2.1	3.3	2.0	2.2	2.3	
2. CORE CONSUMER PRICE INDEX (ANNUAL RATE)	41	1.7	1.9	1.8	1.9	2.0	2.0	2.2	1.9	2.1	2.2	
3. PCE PRICE INDEX (ANNUAL RATE)	36	0.7	1.7	1.7	1.8	2.0	2.0	2.6	1.9	2.0	2.1	
4. CORE PCE PRICE INDEX (ANNUAL RATE)	37	1.1	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.8	2.0	

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.

TABLE FOUR
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	Q4 2011 TO Q1 2012	Q1 2012 TO Q2 2012	Q2 2012 TO Q3 2012	Q3 2012 TO Q4 2012	Q4 2012 TO Q1 2013
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NUMBER OF FORECASTERS					
10 OR LESS	29	18	15	14	11
11 TO 20	11	18	20	21	19
21 TO 30	1	5	6	6	10
31 TO 40	0	0	0	0	0
41 TO 50	0	0	0	0	0
51 TO 60	0	0	0	0	0
61 TO 70	0	0	0	0	0
71 TO 80	0	0	0	0	0
81 TO 90	0	0	0	0	0
91 AND OVER	0	0	0	0	0
NOT REPORTING	4	4	4	4	5

MEAN AND MEDIAN

MEDIAN PROBABILITY	10.00	15.00	15.00	15.00	15.00
MEAN PROBABILITY	9.51	13.41	14.74	14.78	15.77

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 41.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.

TABLE FIVE
MEAN PROBABILITIES

MEAN PROBABILITY ATTACHED TO POSSIBLE
CIVILIAN UNEMPLOYMENT RATES:
(ANNUAL AVERAGE)

	2012	2013	2014	2015
11.0 PERCENT OR MORE	0.14	0.26	0.25	0.08
10.0 TO 10.9 PERCENT	0.27	0.43	1.12	0.17
9.5 TO 9.9 PERCENT	1.63	1.89	1.02	0.43
9.0 TO 9.4 PERCENT	7.92	4.68	2.11	1.02
8.5 TO 8.9 PERCENT	28.78	14.47	5.35	3.85
8.0 TO 8.4 PERCENT	37.77	26.38	16.37	9.30
7.5 TO 7.9 PERCENT	18.60	25.90	27.23	18.97
7.0 TO 7.4 PERCENT	3.96	15.35	23.84	27.21
6.0 TO 6.9 PERCENT	0.69	8.07	16.25	22.35
LESS THAN 6.0 PERCENT	0.23	2.58	6.46	16.62

MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN REAL GDP:
(ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2011-2012	2012-2013	2013-2014	2014-2015
6.0 OR MORE	0.34	1.00	1.46	1.26
5.0 TO 5.9	0.80	2.80	4.82	3.42
4.0 TO 4.9	4.15	7.39	12.33	12.60
3.0 TO 3.9	16.65	22.54	27.01	31.20
2.0 TO 2.9	47.65	37.99	31.32	28.03
1.0 TO 1.9	23.35	18.60	13.03	13.27
0.0 TO 0.9	5.29	5.91	5.96	5.92
-1.0 TO -0.1	1.07	2.35	2.22	2.92
-2.0 TO -1.1	0.47	0.69	0.86	0.72
-3.0 TO -2.1	0.15	0.33	0.42	0.36
LESS THAN -3.0	0.09	0.39	0.59	0.30

MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN GDP PRICE INDEX:
(ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2011-2012	2012-2013
8.0 OR MORE	0.06	0.20
7.0 TO 7.9	0.05	0.14
6.0 TO 6.9	0.09	0.28
5.0 TO 5.9	0.27	0.86
4.0 TO 4.9	1.33	2.21
3.0 TO 3.9	8.48	13.58
2.0 TO 2.9	34.62	37.73
1.0 TO 1.9	45.52	33.56
0.0 TO 0.9	8.25	9.29
WILL DECLINE	1.33	2.40

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.

TABLE SIX
MEAN PROBABILITY OF CORE CPI AND CORE PCE INFLATION (Q4/Q4)

MEAN PROBABILITY ATTACHED TO CORE CPI INFLATION:

	11Q4 TO 12Q4	12Q4 TO 13Q4
4 PERCENT OR MORE	0.86	2.43
3.5 TO 3.9 PERCENT	0.86	2.61
3.0 TO 3.4 PERCENT	3.73	6.15
2.5 TO 2.9 PERCENT	12.23	14.84
2.0 TO 2.4 PERCENT	32.54	30.03
1.5 TO 1.9 PERCENT	29.33	28.44
1.0 TO 1.4 PERCENT	13.69	10.26
0.5 TO 0.9 PERCENT	3.72	2.63
0.0 TO 0.4 PERCENT	2.18	0.60
WILL DECLINE	0.87	2.30

MEAN PROBABILITY ATTACHED TO CORE PCE INFLATION:

	11Q4 TO 12Q4	12Q4 TO 13Q4
4 PERCENT OR MORE	0.83	1.29
3.5 TO 3.9 PERCENT	0.62	1.35
3.0 TO 3.4 PERCENT	2.72	5.33
2.5 TO 2.9 PERCENT	9.42	13.59
2.0 TO 2.4 PERCENT	26.48	28.41
1.5 TO 1.9 PERCENT	34.04	31.81
1.0 TO 1.4 PERCENT	17.96	12.44
0.5 TO 0.9 PERCENT	5.60	4.10
0.0 TO 0.4 PERCENT	1.87	1.32
WILL DECLINE	0.47	0.35

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.

TABLE SEVEN
LONG-TERM (5-YEAR AND 10-YEAR) FORECASTS

ANNUAL AVERAGE OVER THE NEXT 5 YEARS: 2012-2016

CPI INFLATION RATE		PCE INFLATION RATE	
MINIMUM	0.80	MINIMUM	0.60
LOWER QUARTILE	2.00	LOWER QUARTILE	1.80
MEDIAN	2.30	MEDIAN	2.10
UPPER QUARTILE	2.56	UPPER QUARTILE	2.30
MAXIMUM	4.56	MAXIMUM	4.26
MEAN	2.32	MEAN	2.09
STD. DEVIATION	0.63	STD. DEVIATION	0.61
N	41	N	38
MISSING	4	MISSING	7

ANNUAL AVERAGE OVER THE NEXT 10 YEARS: 2012-2021

CPI INFLATION RATE		PCE INFLATION RATE	
MINIMUM	0.99	MINIMUM	0.99
LOWER QUARTILE	2.10	LOWER QUARTILE	2.00
MEDIAN	2.30	MEDIAN	2.15
UPPER QUARTILE	2.70	UPPER QUARTILE	2.50
MAXIMUM	6.40	MAXIMUM	5.76
MEAN	2.49	MEAN	2.25
STD. DEVIATION	0.84	STD. DEVIATION	0.76
N	37	N	34
MISSING	8	MISSING	11

REAL GDP GROWTH RATE		PRODUCTIVITY GROWTH RATE	
MINIMUM	1.90	MINIMUM	1.20
LOWER QUARTILE	2.50	LOWER QUARTILE	1.60
MEDIAN	2.64	MEDIAN	1.85
UPPER QUARTILE	2.90	UPPER QUARTILE	2.10
MAXIMUM	3.75	MAXIMUM	3.10
MEAN	2.67	MEAN	1.93
STD. DEVIATION	0.41	STD. DEVIATION	0.45
N	37	N	26
MISSING	8	MISSING	19

STOCK RETURNS (S&P 500)		BOND RETURNS (10-YEAR)		BILL RETURNS (3-MONTH)	
MINIMUM	4.00	MINIMUM	-2.00	MINIMUM	0.75
LOWER QUARTILE	5.00	LOWER QUARTILE	3.40	LOWER QUARTILE	1.80
MEDIAN	6.80	MEDIAN	4.00	MEDIAN	2.50
UPPER QUARTILE	7.60	UPPER QUARTILE	4.50	UPPER QUARTILE	3.00
MAXIMUM	9.20	MAXIMUM	8.40	MAXIMUM	8.10
MEAN	6.30	MEAN	3.83	MEAN	2.65
STD. DEVIATION	1.54	STD. DEVIATION	1.72	STD. DEVIATION	1.44
N	19	N	26	N	26
MISSING	26	MISSING	19	MISSING	19

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, FIRST QUARTER 2012.